



PORTRAIT OF SOUTH TRANSDANUBIA:
A REGION IN TRANSITION

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PREFACE

The Transdanubian Research Institute celebrates the 60th anniversary of its foundation in 2003. It is an institute of the Centre for Regional Studies of the Hungarian Academy of Sciences that has carried out researches in the South Transdanubian region from the beginning and that emphasised the necessity of regional co-operation and decentralisation at a time when the politicians did not even know what regionalism meant.

More than a decade after the systemic change and just one year before the accession to the European Union, the importance of regionalism is not questioned any longer. Following the enactment of the Act on Regional Development and Spatial Planning in 1996, the decentralised institutions of spatial development were built out all over Hungary, development programmes were made and a conscious region-building activity started, financed from national and European resources. Over the past few years, the self-governments and the economic and non-governmental organisations have learnt to think in regional scale and harmonise their own interests with the common interests of their regions.

South Transdanubia has been the forerunner among the regions of Hungary in the co-operation. The first formalised Hungarian regional co-operation was established in this region in 1993, with the creation of the South Transdanubian Regional Development Foundation. The creation of the Foundation was initiated by the Transdanubian Research Institute, and the first development concept of the region was made by the Institute, too.

The accession to the European Union is both a significant modernisation challenge and an enormous opportunity for South Transdanubia. I am convinced that the academic background available for the decisionmakers is an advantage that can contribute to the successful implementation of our development aims.

I hereby congratulate on the birthday and recommend this volume to the readers. The chapters of the book introducing South Transdanubia from all perspectives were written by the researchers of the Transdanubian Research Institute, this is their present for the new-born South Transdanubian region.

Dr Ferenc Kékes
Chairman of the South Transdanubian
Regional Development Council

SOUTH TRANSDANUBIA IN THE EUROPEAN ECONOMIC AREA

Gyula Horváth

Introduction

The renewal of regional policy, the determination of its organizational structure and tools, a demonstration of this area of policy as an independent socio-economic force and its categorization as an essential element of modernization can be achieved by means of a variety of strategies in the future in Hungary. One choice is that of a regional policy based upon the dominant role of the state and devolution. Another stems from regional initiatives where the regional policy generated is based on decentralization of the machinery of government exercised by the state, combined with local initiatives and regional partnerships in the region's economy. The latter is now a prevailing trend in European development – even in those countries where the leading political forces emphasize the role of the state in market regulation.

Since European integration is moving in the direction of regionalism, the geopolitical position of Hungary and the appreciation of the regional decision-making position in joining the international division of labour, a co-operative, restructuring-oriented, innovative regional policy can be an effective strategy for Hungarian modernization, taking into consideration that, over a longer transitional period, conditions could be established in a differentiated way in the various regions of Hungary.

Those European regions which were able to formulate a development strategy suitable to their own needs, to have it accepted, and to enforce it, stabilized in a relatively short period of time, and their new structures began to grow.

Those regions, however, which were unable to formulate an independent programme could look for regeneration only by means of central support. However, the restructuring of the centrally-led system, following the solutions of the traditional regional development model, brought only temporary stabili-

sation. The economic structure of these regions was preserved, their growth potential and competitiveness stayed poor, and their integration into the international division of labour still meets with difficulties.

The regional development of market economies is not based on a uniform model, but strategies diversified in their various elements are developed for regions in different geographical position and with different structural endowments.

Portrait of the region

South Transdanubia, a region comprising three counties, is situated in the south-western part of the country. It has an area of 14,169 km², covering 15.2 per cent of the country (*Figure 1*).

An international comparison of certain features of South Transdanubia also displays a fringe image (*Figure 2*). Similarly to other peripheral areas of Europe, it is characterized by poor economic performance and by a low level of foreign trade. Another significant feature is the concentration of the regions export activities in cities. The economy of the South Transdanubian region, which is characterized primarily by domestic market-oriented production and East European exports, was unable even to maintain its low-level rate of exports during the transformation into a market economy. Therefore, in the regions development strategy which involves the transformation of the industrial structure, an economic shift towards the services sector and the general development of its infrastructure, the strengthening of its export potential should be considered a decisive, multiplying factor of growth.

South Transdanubia is more industrialized than several peripheral regions of the EU where the proportion of active earners employed in the industrial and services sectors is smaller than in South Transdanubia (*Table 1*).

The high rate of agricultural employment and the insignificance of the service industry sector inevitably, and typically, indicate underdevelopment. The difference between the Mediterranean peripheral areas (where rates as high as 25–50% rates are not rare) and South Transdanubia stems from the higher degree of industrialization in this region. The proportion of industrial employment in underdeveloped EU regions varies between 13–30%; none of the regions in Greece reach – and only two in Portugal exceed – the South Transdanubian average. The regions of the Mezzogiorno are also below 25%. Likewise, the proportion of the service industry sector in the majority of underdeveloped EU regions is below the South Transdanubian average – e.g. 31–40% in most regions of Greece, 33–44% in Portugal – whilst in the developed non-capital regions it rises to 55–70%.

Table 1

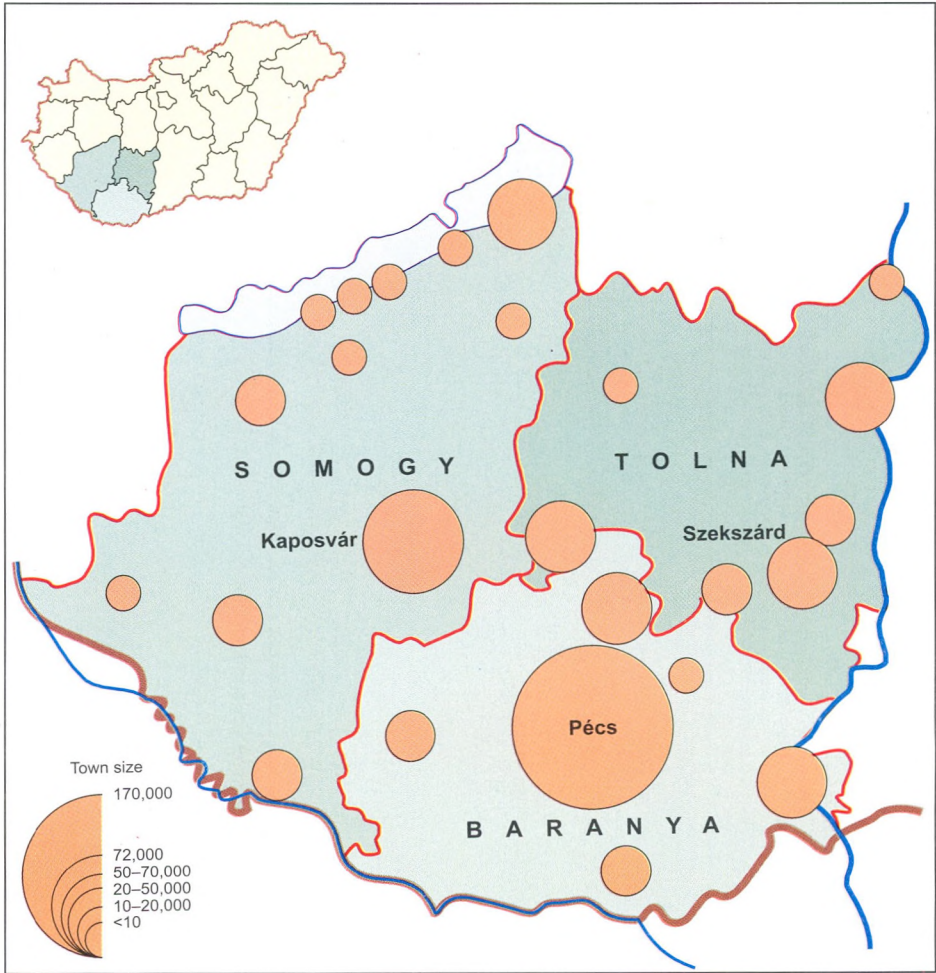
Data of some European regions in a transitory development stage, 1999

Indicators	Lower-Normandy (F)	Friuli-Venezia Giulia (I)	Asturias (ESP)	Kentriki Makedonia (GR)	Liège (B)	Centre (RO) ²⁰⁰¹	South Transdanubia (H) ²⁰⁰¹
Surface area, '000 km ²	17.6	7.8	10.6	18.8	3.9	34.1	11.2
Population, '000	1,420	1,184	1,060	1,796	1,017	2647	993
Population change, 1980–95, %	4.1	-3.4	-0.1	8.4	0.8	-0.4	-4.4
Agricultural employment, %	9.7	4.8	10.3	19.1	2.4	33.2	10.5
Industrial employment, %	25.9	33.5	30.8	25.7	23.9	38.3	33.6
Tertiary employment, %	64.4	61.7	59.0	55.1	73.7	28.5	55.8
Unemployment rate, %	11.7	5.6	18.2	11.7	12.8	6.9	8.2
GDP per capita, EUR15 = 100	87.9	115.9	72.4	67.6	98.6	31.8	37.8
Motorway density, km/'000 km ² , 1994	3.1	26.4	11.0	-	65.1	-	1.4
Percentage of R&D personnel in the active population, 1994	0.4	0.8	0.6	0.4	n.a.	0.2	0.3
Airport traffic, '000 passengers, 1994	747	284	233	1,113	-	75	-
High educational attainment of those aged 25–59, % of total	17	9	9	19	26	7	10

Source: National statistical yearbooks; Second Report on Economic and Social Cohesion.

Figure 1

Location of South Transdanubia

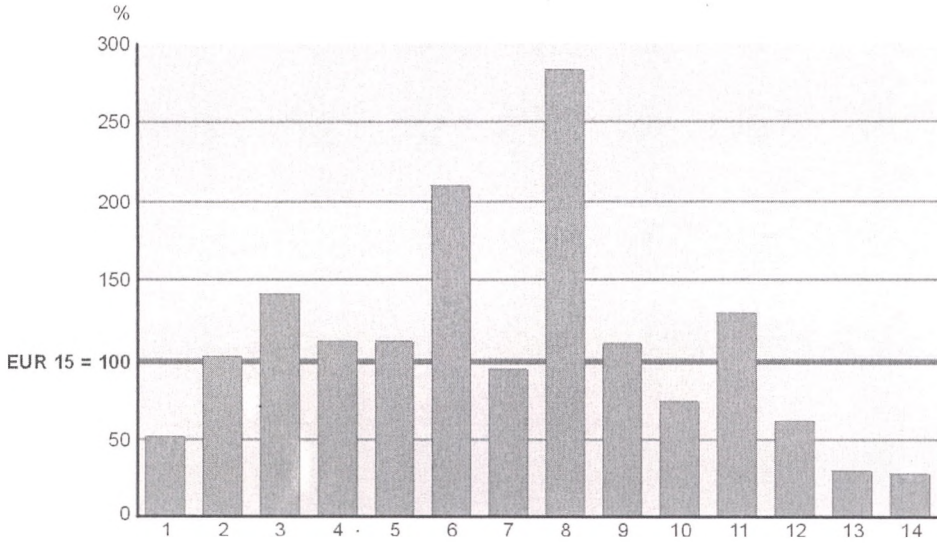


Source: Designed by the author.

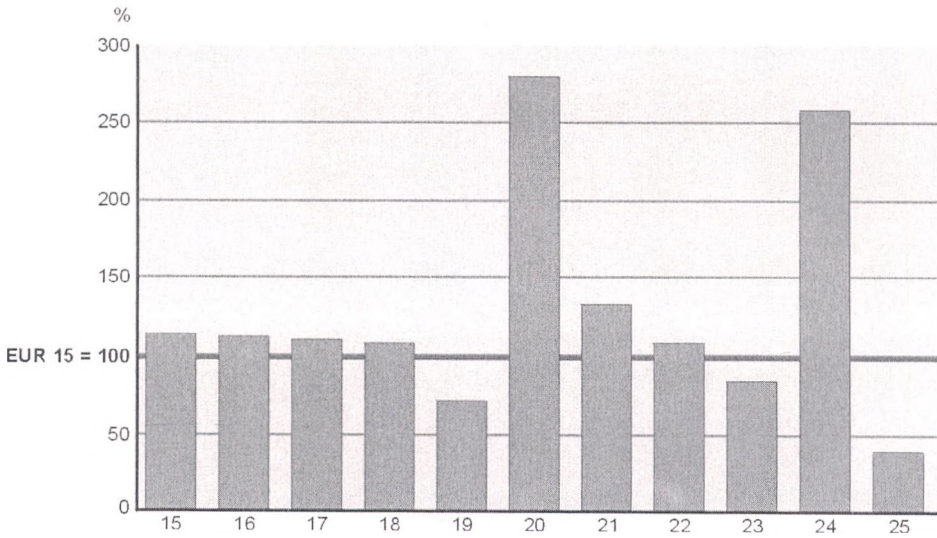
Figure 2

South Transdanubia and the European Union

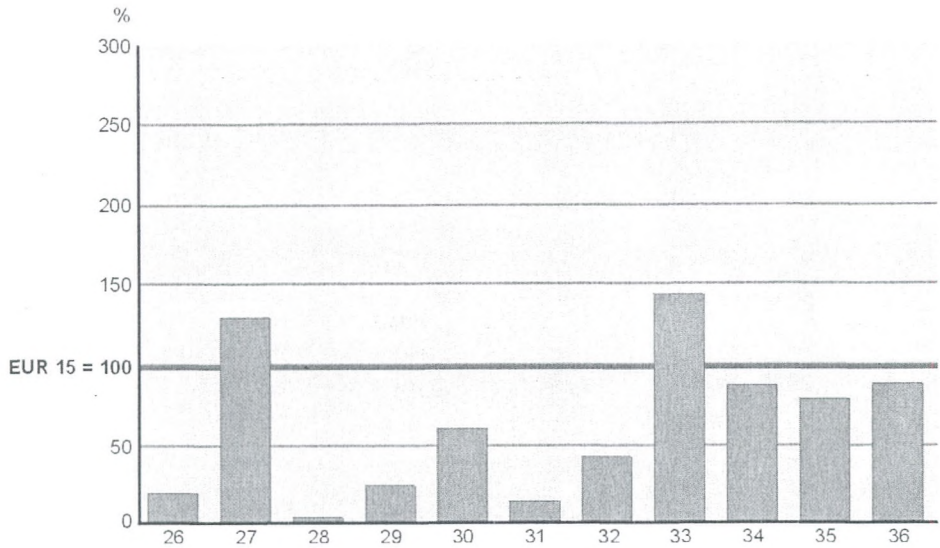
Demography and employment



Agriculture



Infrastructure



Key: 1 – Density, 2 – Birth rate, 3 – Death rate, 4 – Male population 15+ years, 5 – Female population 15+ years, 6 – Infant mortality, 7 – Resident employees, 8 – Agricultural employment, 9 – Industrial employment, 10 – Services sector employment, 11 – Unemployment rate, 12 – Market services employment, 13 – Tertiary level education students, 14 – R&D employment, 15 – Arable land, 16 – Forested area, 17 – Milk production, 18 – Meat production, 19 – Crop production, 20 – Sugar-beet production, 21 – Wine production, 22 – Potato production, 23 – Cattle, 24 – Pigs, 25 – Sheep and goats, 26 – Main telephone lines, 27 – Railway density, 28 – Motorway density, 29 – Main road density, 30 – Cars, 31 – Hotels, 32 – Tourist nights, 33 – Doctors, 34 – Hospital beds, 35 – Consumption of electrical energy, 36 – Population per hundred housing units.

Source: Designed by the author.

In respect of structural transformation, de-industrialization and joining the international division of labour the economic environment is unfavourable. Industries controlled from outside the region have become specialized in order to meet the production requirements of the central region (Budapest) and even the economic autonomy of recently established companies is often restricted. Ford-type mass production operating with state subsidies was supposed to fulfil the requirements of the shortage economy and neither economic nor market pressures encouraged product and process innovation. As a result, the research and development sector has remained weak, and the proportion of products marketable abroad is insignificant. The service industry sector is underdeveloped and the institutional-organizational background is inadequate.

The poor transport and communication infrastructure of the region (the bad quality of roads and railways, the lack of air transport, the deficiencies of telecommunications and the underdevelopment of data processing and transmission) is slowing the transformation process and further diminishing the level of foreign trade activity.

South Transdanubia's geo-economical endowment

South Transdanubia's geo-economical (geopolitical) situation is based first on its position in the Hungarian macro-economic structure, second, on its historical relations with Central-Europe and third, on its orientation to the European spatial division of labour. The impact of these three relational dimensions on economic development assigns different tasks to economic actors and regional development experts.

This region occupies a median position in the Hungarian economy and has integrative relations only with the central region. The region's indigenous cohesion is weak, as is the intensity of producer co-operation – except for the food processing industry. In general terms, major output manufacturing enterprises have stayed away from the region and the whole area is left with no significant processing plants, plants which would have obtained their component parts through regional suppliers. The regional system of production is based upon traditional production factors such as energy and labour, but in the field of modern development functions such as R&D, marketing, market research etc. the region depends on the capital city. This economically peripheral situation which is coupled with peripheral features of a physical nature – namely, with poor infrastructure linkages – makes the region's opportunities to participate in the national division of labour, restructuring and diversification rather dubious.

There are various obstacles which hinder the region's inner cohesion, such as long-lasting disintegrative elements of the earlier "branch plant" system, the simultaneous efforts of the region's cities (county-towns) for the expansion of their individual modern competences, the lack of cooperation based on considerations of mutual benefit and competition for the attraction of new organisations. Simultaneous efforts do generate advantages for the region's development centres and the emergence of business and financial background services for the economy can serve as a source of economic development. The need for co-operation can be explained by the drafting, elaboration and enforcement of major directives on the spatial distribution of labour, spatial types and urban potentials, in different development projects. Without them the region will be unable to find such a role in the country's national macro-regional system

which would be in harmony with its own resources, demands and interests, and the region's economic transformation would be motivated by external factors and interests, which would preserve the old, traditional system of relationships and which would mean that income earned here would be used for the development of another region.

The preconditions for implementing the region's interests under the circumstances of the present, highly fragmented administrative and economic institutional system are also unpromising from the point of view of establishing external relations. The export potential of South Transdanubia's economy is poor and the presence of foreign capital in joint-ventures and in privatised companies is not substantial. The region's peripheral situation and institutional interregional relations are not so important in the geo-economic sense, and so it lacks an important element which could provide the potential to become a major development factor. This can be explained by the above-mentioned weaknesses of the economic institutional system, the lack of foreign economic strategy, international regional markets (target regions, intervention regions) and by what we might term the spontaneous nature of export.



Pécs is the natural centre of the region although an official decision about the seat of the region has not been made yet. (Photo by László Körtevényesi)

Although South Transdanubia's foreign economic orientation bears a similarity to national trends (the predominance of exports to Germany anticipated in our survey did not reveal the increasing role of West Central European economic relations), research results indicate the importance of the Alps-Adria region in exports. Almost one-fifth of the goods exported from Baranya and Somogy counties went to the member provinces of the Alpe-Adria Working Community in 1999 (Table 2). This should be considered as an important factor, and during the preparation of the region's foreign economic strategy a high priority should be given to these regions – more specifically, North Italian, South German and Austrian regions should be given such priority both through the development of an economic information system and through export incentives.

Table 2

Exports from South Transdanubian counties into Alpine-Adriatic regions (million HUF*), 1998

Alpine-Adriatic region	Baranya	Somogy	Tolna	Total
Carinthia	47.0	123.3	9.0	179.3
Burgenland	19.0	22.8	–	41.8
Salzburg	–	–	18.0	18.0
Upper Austria	601.3	205.6	630.0	1,436.9
Styria	226.0	365.5	270.0	861.5
Bavaria	441.6	530.0	45.0	1,016.6
Veneto	150.3	50.3	139.5	340.1
Friuli-Venezia Giulia	56.4	251.3	–	307.7
Lombardy	18.8	1,407.3	157.5	1,583.6
Slovenia	–	4.6	–	4.6
Croatia	49.0	67.9	–	55.9
Total	1,609.4	3,028.6	1,269.0	5,907
Percentage of total export	10.7	31.0	16.5	18.2

Source: Individual survey by the author.

For a variety of reasons a comprehensive study of the Mediterranean region is desirable. On the one hand, intensive development has commenced in the region during the last ten years, and the European Union is providing significant financial support for the creation of a new development axis within the European Union; on the other hand the macro-level foreign economic interests of Hungary call for the intensification of relations with Portugal, Greece and

* The exchange rate was 255 HUF/Euro in September 2003.

Cyprus. South Transdanubia could serve as a bridge for Mediterranean relations, bearing in mind also future economic changes in the Balkan Peninsula.

Because of the region's historical relations and geopolitical situation, the formation of its institutional relations and other (mainly cultural and educational) potentialities newly directed in the development of regional power centres South Transdanubia's foreign market orientation should be aimed towards the Mediterranean and Alpine-Adriatic regions. The region's economic and spatial interest groups should agree on and define those tasks to be accomplished either through co-operation embracing the region as a whole, or independently at county and/or micro-regional level.

Main directions of regional economic development strategy

During the structural adaptation of, and changes in, regional economy – especially if evidenced in a need for a sound and rapid restructuring process – the contradiction between continuity and radical restructuring is a classic dilemma. The basic problem is that South Transdanubia's economy is developing on its present basis, whilst a market-oriented modernisation process needs a completely different structure which simply cannot be based on current conditions.

There is a significant difference between the perspectives of organic development based on the present structure and the perspectives based on a market system. South Transdanubia's present product and institutional system is totally different from the ideal. Clearly, neither theoretical nor practical reasons can explain the neglect of organic development in a strategic plan, something that must be based upon the actual, existing situation.

This strategic plan should be a programme of small steps and gradual diversification that can serve as a basis for long-term structural change. This is the point from which the second thesis of this strategy should start. It should declare that the primary source of development is the reinforcement of regional economy, which can evolve from the economic sector through the medium of companies and enterprises. The new basis of the rehabilitation of regional economic potential can be the result of changes in the company – market sector that occur in an entrepreneurial – market environment. All central and local territorial interventions have an external character, but they must exert influence on the regional and sectoral aspects of working capital through subsidiaries, rewards (incentives and controls), regional receptivity and environmental control. The most important target of central and local government interventions is to transmit these interests to economic sectors less sensitive to regional

interests and with their implementation in a positive market-oriented (and only in extreme cases administrative) fashion. This function, therefore, is the promotion of the development of South Transdanubia providing some help for its ongoing adaptation to market conditions, the utilisation of internal resources by the active use of external subsidies and incentives with special regard to regional-local potential and conditions. The three key issues of regional interest related to this function are as follows:

- the intensification of the spatial division of labour and the promotion of regional market conditions,
- the growth of the region's community and individual income resources,
- the rational employment of the population.

Income and employment would appear to be the most obvious interests and – because of the existing model of regional development – the spatial division of labour and cooperation do not. This is the reason why they need to be the third element in this strategy. The introduction of a competitive economy can be completed by the regionalisation of spatial economy and the enforcement of regional linkages. The basis of spatial cooperation may be the coalition of interests bound to regional development, which will increasingly develop a material- and income-related character, since there is intensifying competition among the regions. (There is, of course competition within the region among the micro-regions and settlements also, but this will be subordinated to interregional competition within a definite period.) Succeeding in competition – i.e. regional development – will raise the income-asset position of all participants (although it may also decrease).

With the gradual development of a region's economy and markets the regional economic development and structure may be based more and more on internal conditions, and durable development (the establishment and maintenance of balance in regional development) may be grounded on local resources, conditions and potential, assuming maximum or optimal utilisation.

This may serve as a means of creating the preconditions for the continuous adaptation of regional economy within the region and of avoiding regional crisis situations resulting from constrained structural changes.

The nodes of the regional distribution and cooperation system may be defined as development clusters serving as fundamental elements for a regional development strategy. These clusters are density nodes in the regional economy:

- which serve as a network of vertically integrated economic organisations which produce competitive products or services as a result of profitable production based on the region's local resources,

- which, on the other hand, form such a system from the region's economic-service organisations which can transmit direct market conditions, information and market impulses based on mutual interests.

These clusters may have a primary, although not an exclusive, role in the region's economic development. This is true, mainly with a short-term perspective, as a market-oriented regional distribution of work is the result of a long process. Today there are no instances of regional co-operation within the region in fields where their existence would be evident (e.g. in the leather industry – leather clothes and glove manufacture, wood processing – the furniture industry etc.) since the economic system followed the central model of the sectoral distribution of work in the national economy. At the same time the regionalisation of spatial economy in an open economic system means that external economic relations are maintained for a long time and in some sectors may have a key role to play, being based on regional potential and conditions.

When the actors who participate in regional-local economy are asked for their views, all give a stereotypical answer: the main obstacles to development are the lack of capital resources, high interest rates (inflation), the high rate curtailment of incomes with low rentability, and – as a secondary factor – the underdevelopment of the infrastructure. We are unable to argue against this. The region's development strategy cannot deal with these primary factors; they are elements of the macro-economic system and serve as a background to the programme.

Intensifying the region's export potential

Competitive industrial production may be a further basis for economic development. The traditional sectors dominate in South Transdanubia's existing economic structure – with weak export opportunities – and for this reason the region performs poorly in terms of its foreign economic relationships. Re-industrialisation, the first sign of the presence of the market economy (industrial restructuring), should be followed by the reinforcement of international competitiveness and a growth in the rate of exports. Therefore, an industrial development strategy should be drafted which includes all the elements of international competitiveness (the chain of innovation) and selects those sectors which are capable of producing exportable goods and which should, therefore, be developed. The development of industrial exports should be prioritised for a variety of reasons: they account for two-thirds of South Transdanubia's overall export volume, and here is the greatest need for improvements in innovation and

technology. The region has a favourable geo-economic position and comparative advantages for industrial development, and – finally – this sector offers the best opportunities for joining international networks.

The majority of Hungary's – and South Transdanubia's – exports to the EU countries consists of food and light industrial products, machinery and equipment. These are basic products for which EU countries have a growing demand and there is strong competition in this market. An increase in the export of Hungarian products in this category may result only from a gradual easing of Western European import restrictions and from the achievement of something approaching competitiveness with traditional EU providers

The drafting of the region's new strategy for industrial development will not be an easy task for planners. Except for the electronics, plastics and wood industries, all sectors need heavy investment to expand their export capacities. These investments (in furniture and in some areas of the food processing industry) together with the introduction of new competitive sectors are essential for a new export-oriented industrial structure in the region.

The desirable basic economic principles and the development of export capacities can be realised if the government (in line with its concept for industrial development) in the new stage of privatisation and in order to attract foreign capital would promote the establishment of some large multinational firms. Without this the region will not be able to reach a 25 per cent export rate (the national average) in selling industrial products and to increase its export volume by 15–18 billion HUF.

Regional development and technology innovation

According to the characteristic features of different historical periods, various factors have an influence on a region's economic development. Industrialisation had a primary role in South Transdanubia's transformation process after the Second World War. Following the typical peripheral pattern of de-industrialisation restructuring in the region was funded from external sources and was based on decisions (central or company) that were made outside the region. This was so, even with the development of the food industry that had the closest relationship with the region's natural potential. Industrialization, which first reached the cities, was characterized by the establishment of branch organizations in the processing industry which had been based in Budapest and then, by the creation of branches, into major rural settlements.

Industrialization starting from central locations had similar results to those in West- and South-European regional development. Due to the current trends

in economic and social administration there were no forces which could have done anything against the central region's practice of relocating the manufacture of products in the final stage of their life cycle into the regions – with the aim of reorganising their production structure and making way for technological innovation. There was a further trend that had some effect on South Transdanubia's industrialization process in which innovative, vertically organized companies implemented modern technology in the region. These branches, however, either specialized in the manufacture of components only, or else the strategic decisions on manufacturing, product development and selling were made in Budapest. The establishment of working contacts among company branches located in different counties was a rarity. Likewise internal economic cohesion among companies in South Transdanubia was weak. Our investigation into the inter-sectoral relations of industry in South Transdanubia showed that only 12 per cent of semi-finished or finished products manufactured here remained in the region, the remainder being taken elsewhere for further processing. The innovative relations of companies and industrial cooperatives funded by internal regional resources – if they produced marketable products – depended on their headquarters (credit negotiations, international sales and accessing technological and market information were possible only through corporate headquarters located in Budapest).

Until the middle of the 1980s counties and settlements in South Transdanubia were forced into a passive role in this process, and they could form their own concepts for the main trends of restructuring only in the subsequent period. However, by this time they had closed down most of their affiliated branches and the volume of industrial production and exports decreased. In this way the recession made the application of some elements of the so-called "peripheral utilization model" impossible. The earlier development trends had had such a strong impact on policymakers in the region, that they still saw alternatives only in the mobilisation of external resources (privatization and joint-venture foundations alone were considered to be the real essence of restructuring).

In our opinion, the aims of structural change in the economy, sectoral change and the establishment of a competitive economic configuration should be achieved by the reinforcement of South Transdanubia's innovative potential, by technical and technological modernization and by the foundation of a background service system for product and production innovation.

During the last 15 years of West European regional development changes both in technology and technological development in lagging regions with affiliated productive, business and informatics-related background sectors were of primary importance. These undertakings, on the one hand had priority in national regional programmes and, on the other hand, the development of in-

novative potential in lagging and depressed regions was declared as one of the European Community's major target programmes for cohesion and reinforcement.

All the three South Transdanubian counties are poorly situated in his respect. South Transdanubia has a semi-peripheral character, and in the whole country Budapest dominates in all fields of innovative potential.

This also means that Hungarian regional policy should pay close attention to the decentralisation of R&D and should make strenuous efforts to ensure that fiscal, monetary, industrial and commercial policy should bear in mind that, although the crisis management of these regions can be undertaken without significant development of technology and research, recovery cannot. The basic targets of European technology policies should be integrated into the target system of Hungary's regional policy also.

What are the characteristic features of the innovative capacity in the three counties of South Transdanubia:

- There is a shortage of training and interest in new technologies in this region;
- The technology level of products is low and the incidence of specifically designed products is also low;
- Enterprises sell their products exclusively on home and East European markets;
- The inclination of small enterprises towards cooperation is very low; their knowledge of the market is inadequate and they undertake no marketing.

Poor producer and business services

The growth and the qualitative differentiation of the tertiary sector has been the most spectacular concomitant phenomenon of the change in European market economies. This sector has achieved a major position in all of the countries of the European Union. The growth in the relative size of the service sector is a major result of the structural change in the European regions: the rate in the favoured regions in terms of the proportion of employees is over 50 per cent. *Table 3* shows the employment levels of the tertiary sector in some Central European regions according to different regional categories. (The categorisation in the case of non-EEC regions has a somewhat random character, but the conclusion to be drawn from these data is clear: the surrounding regions enjoy a much higher level of sectorisation at tertiary level.

Table 3

The proportion of employees in the services sector in some
Central-European regions, 2000

Types of region	Region	Percentage share of employees in services sector
Lagging regions	Karinthia (A)	58.9
	Burgenland (A)	68.1
	Trentino-Alto Adige (I)	64.4
	Slovenia	51.2
	Croatia	48.3
Regions in industrial decline	Upper-Austria (A)	60.5
	Liguria (I)	73.3
	Piemonte (I)	56.2
	Styria (A)	57.7
Favoured regions	Bavaria (D)	60.3
	Baden-Württemberg (D)	56.1
	Lombardy (I)	56.8
	Veneto (I)	52.3
	Friuli-Venezia Giulia (I)	61.7
	Salzburg (A)	68.6
South Transdanubia	Baranya county	57.8
	Somogy county	56.6
	Tolna county	49.3
	Total	55.8

Source: Authors calculation on the basis of national statistical yearbooks.

While the tertiary sector has a primary role in the growth of job opportunities, economic efficiency and competitiveness are influenced by producer and business services. Research and development are analysed above with all of the activities that are associated with the last block in the innovation chain. The growing importance of services during the last 20 years is based on various factors. These are worthy of deeper analysis since they will play an important role in the future of South Transdanubian regional development:

- The role of innovation and non-cost factors has grown in economic competition. At the same time the manufacture of standard commercial goods has decreased whilst the diversification of products and markets continues to increase. As a consequence of these changes cooperation between production and services has become more intensive, since the special needs of narrow consumer groups need to be taken into account;

- The role of information with marketing and technical knowledge has grown, since their role in production input is superior to that of raw materials and manual processing;
- The complexity of company decision systems started with the establishment of local regional clusters. Local cooperation was built on a complex management task system;
- Due to rapid changes in technology, the time-schedule of decision-making processes has grown for the sake of better economic organization;
- The rapid development of transport and communication has decreased the reaction time of production development, and this has generated new, special tasks;
- The role of externalities in company management (European Union standards, quality instructions, different obligatory specifications etc.) has increased.

Thus, in this new stage of industrial development – where South Transdanubia is on the periphery of Central European regions which have achieved this new stage of development – technology information and financial resources which are capable of utilising new technological advantages and of promoting market development are the key-factors for enterprises rather than material input-output linkages. Producer and business services have a primary role in research and coordination in respect of these resources.

The development level of these services determines a region's capabilities of internal development, namely the institutional systems that a region can use for the optimal achievement of its targets. If a region has only a limited institutional system or none at all, its economy should use another – namely a central region's service system, which will, of course, result in a new form of economic dependency for the given region. This would be similar to the disadvantages of industrialisation. This is why regional policy should facilitate the diffusion of services by means of different incentives.

In South Transdanubia – as in other areas of Hungary – both the supply and quality of producer and business services are very low. The number of organizations' employees in this sector is very small (*Table 4*). In developed countries these activities are tied to the cities, and this is also true in the case of South-Transdanubia.

County towns enjoy a relatively better position in the field of those services generally organized on a county-level basis (insurance, career guidance, advertising, quality control) and new "corporate headquarters-based" organizations (personnel counselling, banking services) prefer the largest towns when selecting their location.

Table 4

The number of employees in business and production services, 2001

County	Banking, financial, insurance services	R&D	Real estate and business activities	Total	Percentage share
Baranya	1,538	2,690	1,766	5,994	6.9
Somogy	1,134	544	1,717	3,395	4.7
Tolna	851	17	2,611	3,479	6.4
South Transdanubia	3,523	3,251	6,094	12,868	6.0

1) Full-time employees.

Source: Regional Statistical Yearbook.

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THE SETTLEMENT NETWORK

Zoltán Hajdú

The specific settlement network features of South Transdanubia

South Transdanubia occupies 15.2% of the surface area of Hungary, but at the same time its population only amounts to 9.8% of the total population. However, 20.8% of all settlements are found in South Transdanubia, and hence the settlement density of the region is very high. The territorial distribution of these settlements and settlement density are remarkably uneven. With regard to the number of settlements per 100 km², South Transdanubia holds first place amongst all of the regions of the country.

Concerning the proportion of the urban population, the South Transdanubian figure (55.6%) falls significantly short of the national average of 64.1% (data from 2001), and represents the lowest regional figure. There are also considerable differences between the counties of the South Transdanubian region with respect to this level of urban population (Baranya 63.2%, Somogy 47.9%, Tolna 54.0%), but equalisation has become the long-term determining trend in the region.

If we examine and compare the county surface area per town, we find that one of the peculiarities of the South Transdanubian settlement network is clearly reflected here, namely that the county surface area per town is high and that, as we shall see in our detailed territorial analysis, there are still a notable number of areas in the region which lack towns.

In respect of the average number of inhabitants per village, the average for South Transdanubia (711 people) falls significantly short of the national average (1259 people). The average number of inhabitants per village is the lowest in Baranya and in relation to the whole country South Transdanubia displays the most vigorous micro-village character.

Pécs with its population of 159,000 people lies in the middle rank of towns playing a regional role. Debrecen and Miskolc are more densely populated, the population of Szeged is nearly the same, whilst that of Győr is significantly lower.

The internal structure of the settlement network in South Transdanubia

The settlement network of South Transdanubia shows many peculiarities compared to the country as a whole and, furthermore, the region is also uniquely divided internally in many respects as well as on a county scale. The number of inhabitants of the settlements shows extreme patterns and this suggests development possibilities of clearly very different nature, quality and scale.

The region belongs to the least densely populated regions of the country. The natural geographical environment is relatively less stretched here, the forest per inhabitant ratio of the region is the highest in the country, and at the same time the ethnic composition and cultural endowments of the population are remarkably varied. Through ethnic and family connections a proportion of the population also has some form of ties reaching beyond the national borders.

The economic development level of minor areas and settlements within the region is strongly differentiated and is being rearranged. One part of the surface area of South Transdanubia was already classified as "disadvantaged and backward" by central government from both social and economic points of view and is likely to be classified likewise in the future also.

Apart from this, there are areas (e.g. the shore of Lake Balaton) and settlements (firstly the county towns, other towns, dynamically developing macro-villages and holiday resorts) in the region which, according to Hungarian standards, faced external (Western) influence, markets and demand at an early stage.

A part of the local society of the region already undertook market-oriented (private) business in the era of the planned economy, and so it is economically more mobile, venturesome and adaptable by means of this earlier than the Hungarian average.

When we examine this differentiation of the settlement network we can see that this in itself does not hamper regional economic development and the dynamisation of the economy. We should emphasise rather that the established, and in many respects peculiar, settlement network structure makes it possible for a variety of economic activities to be pursued since these settlements so very varied in their nature and scale both need and allow different levels of production and service development.

Observing the possibilities from the point of view of the region and of the types of individual settlement we can assert that developments based on the internal resources of the region and of the settlements which primarily serve local market demand (in particular complying with the new demand brought about by the transformation of agriculture) need to be started urgently, and at the same time a proportion of national resources is needed in order to achieve better integration into the national and international labour division.

Classification of settlements by size

The settlement network of the three South Transdanubian counties has many internal peculiarities and specialities beyond the above-listed common features when compared to the rest of the country. Dividing the settlements according to size (see *Figure 1* and *Table 1*) shows unique attributes both in the whole and also when further broken down within the single counties. The different settlement types require different approaches and suggest different development possibilities.

Table 1

Size groups of settlements in South Transdanubia

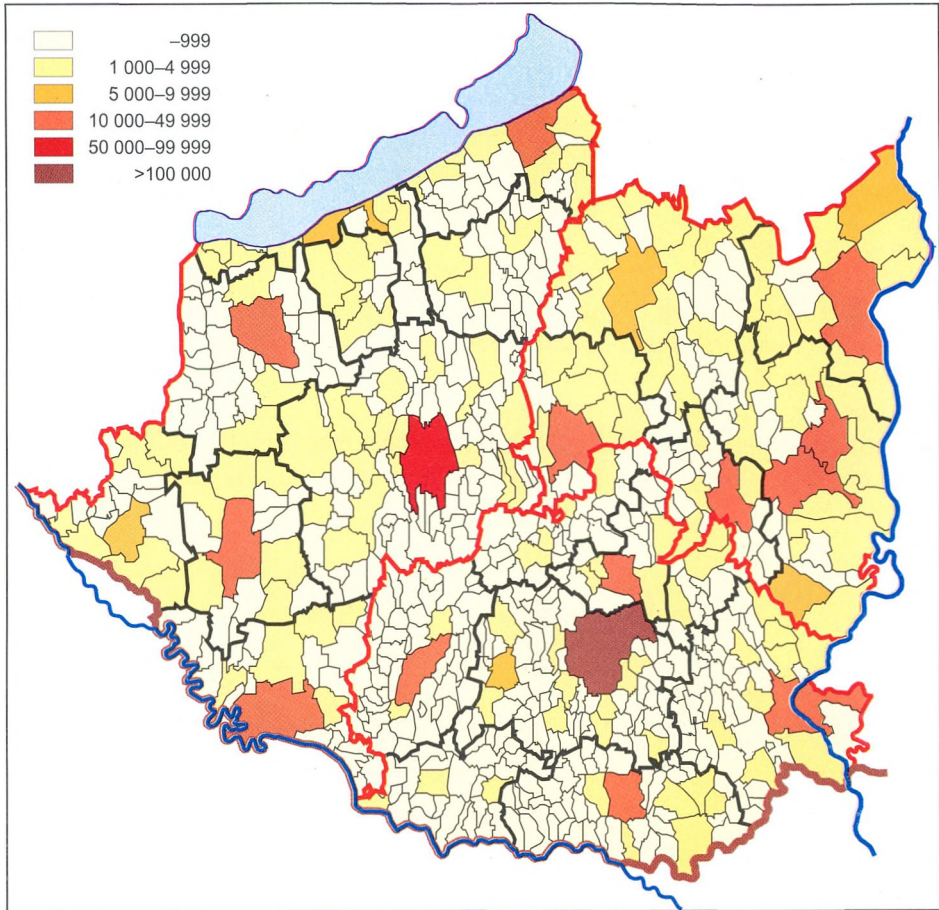
Territorial unit	Number of settlements	Size groups of settlements							
		-499	500-999	1000-1999	2000-4999	5000-9999	10,000-49,999	50,000-99,999	100 000-
Baranya county	301	200	53	28	14	1	4	-	1
Somogy county	244	106	69	43	17	4	4	1	-
Tolna county	108	29	24	30	17	3	5	-	-
South Transdanubia	653	335	146	101	48	8	13	1	1
Hungary total	3,135	1,012	690	648	504	139	121	12	9

Source: Regional statistical yearbook, 2001.

A greater part of the settlements in the region (481, or. 73.7%) belong to the category of "below 999 inhabitants" and 19.8% of the population of the region live here. The number of inhabitants in itself is not totally decisive in this category either; since transport facilities and the accessibility of towns also play an important role. The majority of these villages have an ageing demographic structure; the population is decreasing dramatically in most of the villages and the education and adaptability level of the active population is relatively low.

Figure 1

Size groups of settlements in South Transdanubia, 2002, I. 1



Source: Gazetteer of the Republic of Hungary, 2003, January.

A distinct problem in this size category is caused by the number of villages with an increasing ratio of Roma population. In many cases the expression “inactive settlement” has been coined where the overwhelming majority of the population have neither salary nor wage, but live on different types of allowances.

Over the past decade, however, something has “moved” even in some of these settlements. An improvement in living conditions has been started and there has been a real breakthrough in particular in the supply of clean drinking

water. The development and reconstruction of the telephone network has also been finished. Depending on the location of the villages within the network, the expansion of a piped gas supply has also been accomplished.

In the majority of these settlements the basic question to be formulated is whether or not they will be able to handle their absolute or relative backwardness at the beginning of the era of the market economy and whether or not they will be able to extract any benefit from it in any way. In these settlements (with a few rare exceptions) no capital from outside the regional or national borders can be expected. The rudimentary question is what does the future of the "losing" community's traditional basic institutions (school, post office, public transport, etc.) holds.



Szenna, there is an open-air museum displaying the architectural and cultural heritage of the past. (Photo by György Mánfai)

The settlements with a larger number of inhabitants (i.e., 48 with populations ranging from 2,000 to 4,999) are home to 14% of the population and some of these have already been awarded town status. There are also many villages that already possess the local resources making it possible to establish their own

internal infrastructure and local economic activity systematically in future years. These settlements, depending on their unique characteristics, can attract external resources also, but any large-scale appearance of this is unlikely.

The settlements with 5,000 to 9,999 inhabitants (8 in number and where 5.6% of the population live) all have legal urban status. These settlements do have the opportunity and ability to become integrated into the international division of labour.

The settlements with a population of 10,000 to 49,999 people (13 in number and holding 23.5% of the population) are functionally developed small towns. Szekszárd is also present in this circle even though it is also a county town. The towns have an organically developed local infrastructure, their labour force is trained and probably all kinds of investment are possible here. The economic, service, credit institute, etc. institutional system of these towns is well developed, efficient and accessible.

The town of county rank (Kaposvár) with a population of more than 50,000 people represents such a large scale (6.9% of the inhabitants of the region live here) and settlement level to be suitable for hosting developments based upon major, even international, co-operation. The educational level of its workforce, its developed infrastructure and network systems have already attracted international capital and so what remains is merely the extension of this.

Pécs with its order of magnitude (16.1% of the population of the region live here) is unequalled in the South Transdanubian region. Its investment absorption capacity can be of European significance, but, in fact, the presence of foreign capital is as yet limited compared to the size and potential possibilities of the city. Pécs has available a research, intellectual and workforce basis which ensures opportunities for comprehensive development. The possibilities of the city can greatly increase in the future in the direction of the Southern Slav region and local enterprises may become involved in the necessary several years' of reconstruction work as well as appearing at a later date in the production sector.

Classification of towns

By the 1st of January 2002 there were 12 towns in Baranya, 13 in Somogy and 9 in Tolna. The territorial distribution of the towns has become better balanced and the extension of the areas lacking towns has greatly diminished. With the "ceremonial" towns established in the 1990s the scale of the towns in South Transdanubia was substantially broadened. "Ceremonial" meaning here settlements wearing legal town status, but in fact, functionally they are not real towns.

The spatial structure and functional positions of the towns must be examined partly within the narrow region and partly within the entire, wider region.

The peculiarities and competitiveness problems of towns might then appear with different attributes in the two territorial structures.

The most striking of these peculiarities is that there are significant differences relating to the weight and role of the county towns within the counties. The functional peculiarities are not solely dependent upon the population size of the towns, but a small-scale population is in many cases a natural impediment to the establishment of certain functions.

While 39.3% of all the inhabitants of Baranya county and the city of Pécs (406,330 people) lived in the county town (159,794 people) in 2002, the same ratio in the case of Somogy (336,799) and Kaposvár (68,202) amounted to only 20.2% and in the case of Tolna (250,337) and Szekszárd (35,869) to a mere 14.3%. This distribution meant that the weight of Pécs in Baranya county is double that of Budapest in the whole country, Kaposvár is of equal weight to Budapest whilst the predominance of Szekszárd is significantly less within its county.

Within Baranya county there is no real counterpoise to Pécs. In 2002 the total population of the other designated towns of the county (Bóly – 3,715; Harkány – 3,437; Komló – 27,462; Mohács – 19,085; Pécsvárad – 4,097; Sásd – 3,570; Sellye – 3,248; Siklós – 10,384; Szentlőrinc – 7,265; Szigetvár – 11,492; Villány – 2,793) amounted to 96,548 people, so falling significantly short of the population of Pécs. Small towns represent neither genuine competition, nor a genuine counterpoise for Pécs, in effect. Within the county the settlement prestige of Pécs is overwhelming.

In Somogy the total population of the designated towns other than the county town (Balatonboglár – 6,076; Balatonföldvár – 2,108; Balatonlelle – 5,002; Barcs – 12,343; Csurgó – 5,788; Fonyód – 5,296; Lengyeltóti – 3,443; Marcali – 12,575; Nagyatád – 12,065; Nagybajom – 6,951; Siófok – 23,460; Tab – 4,914) amounted to 100,021 people, and so the total number of inhabitants of the towns exceeded that of Kaposvár by a considerable margin. The towns of the county show a more balanced structure both regarding scale and functionality than is the case in Baranya, with the main difference perhaps being that the settlement prestige of the individual towns (above all of Siófok) is equal to that of Kaposvár within the county as well as on a national scale.

In Tolna the total population of the towns apart from Szekszárd (Bátaszék – 6,925; Bonyhád – 14,401; Dombóvár – 21,066; Dunaföldvár – 9,212; Paks – 20,954; Simontornya – 4,606; Tamási – 9,830; Tolna 12,195; totalling 99,189 people) considerably exceeds that of Szekszárd and consequently, the settlement prestige of Szekszárd is not so overwhelming in relation to the county as a whole.

The role of the towns in the region, the counties and the statistical micro-regions is outstanding and decisive mostly with regard to the public utilities and

services of a regional nature. Most of the secondary education, health-care and other provisions are concentrated to the towns.

Peculiarities of villages

The region also demonstrates specifically county peculiarities with regard to its villages. In 2002 the average number of inhabitants in villages was the highest in Tolna (1,164) which is more than double the figure of Baranya (519). Beyond this Tolna itself is divided, some parts are of micro-village character, while the zone along the Danube is characterised by a medium- and macro-village structure.

As a result of the previous settlement development policy, the institutional provisions of villages are today still largely scale-specific, and the institution network of the micro-villages was deliberately eliminated and made district-based.

The historically developed functional character of the settlements has changed remarkably quickly over the past decade as a result of the rapid – and in many respects radical – economic, social and political movements. Earlier, the functional types of settlement and town could relatively easily be depicted with the help of employment patterns whilst today, in these days of rapid economic transformation, this index has become purely relative.

The connections between the settlements were also radically changed in the 1990s and the transformation of administration triggered far-reaching effects in many respects:

- With the elimination of village councils and the comprehensive establishment of local governments the administrative connections between villages changed. The elimination of “partner” villages and the equalisation of villages can be regarded as a change for the better.
- With the elimination of the unified town-based administration system introduced in 1984 the institutional connections between village and urban administration were terminated.
- When the statistical micro-regional division was shaped, not all settlements designated as of town status were given an “independent district” and the district system has been turned into a multi-focal structure through those settlements subsequently accorded town status.

Settlement clusters

The functioning of the settlement network of the country and the questions of connection intensity between settlements has been in the focus of settlement science research recently. According to the concept and spatial system used in the publications of the Central Statistical Office on the settlement network, there are 23 settlement clusters (agglomerations, agglomerating regions, urbanising regions, major city settlement groups and minor settlement groups) in the country in 2002 – which are also divided within their internal spatial system. The different settlement clusters comprise 61 towns and 499 agglomerate settlements with about 5.6 million people living there.

One agglomeration out of the three in Hungary (Pécs) is situated in South Transdanubia, exactly as one out of the three urbanising regions (Kaposvár) and one out of the eight major city settlement clusters (Szekszárd).

The settlement clusters with their different characters and qualities developed in the South Transdanubian region (see *Figure 2*) do not embrace and do not integrate all the settlements of the region.

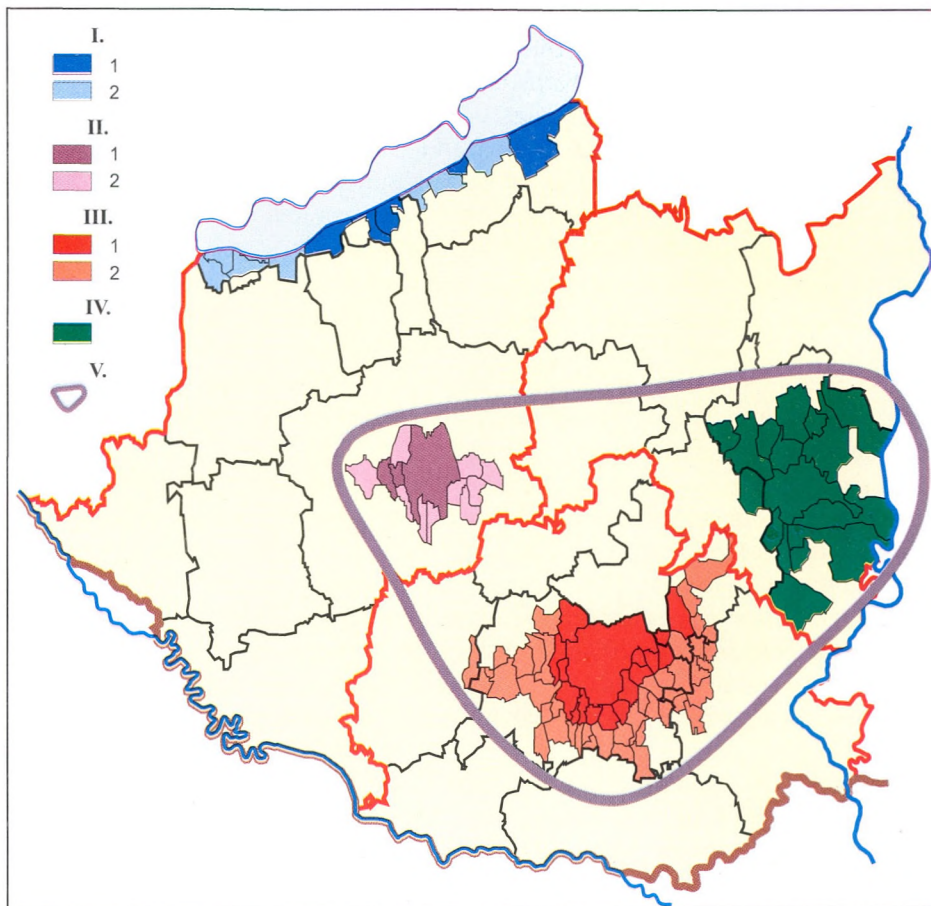
The most intensive connection system among settlements in South Transdanubia has been developed around Pécs. According to the research and specification of the Central Statistical Office, 62 settlements constitute the agglomeration together with the city of Pécs. 16 villages around Pécs form an inner and 45 settlements an outer agglomeration circle. The total number of inhabitants in this agglomeration amounts to almost 210,000. There are considerable differences among the settlements of the agglomeration in every respect, but they all share the characteristic feature that they maintain strong functional relations with Pécs.

Around Lake Balaton another agglomerating region is taking shape connected to the holiday and tourism function. The region partly extends over three counties (Somogy, Veszprém and Zala). 33 agglomerate settlements belong to the 8 co-centres. The number of inhabitants in the 41 settlements amounts to 130,000, but this figure expands greatly in the summer season. (Five sub-centres and nine agglomerate settlements of these are in Somogy.)

There is an urbanising region around Kaposvár and the 13 settlements involved are home to some 80,000 people.

Figure 2

Settlement clusters in South Transdanubia



Key: I.1 – Centers of Balaton agglomeration; I.2 – Settlements in Balaton agglomeration; II.1 – Inner settlements of Kaposvár urbanising region; II.2 – Outer settlements of Kaposvár urbanising region; III.1. – Inner settlements of Pécs agglomeration; III.2 – Outer settlements of Pécs agglomeration; IV – Szekszárd major city settlement cluster; V – Border of core area of South Transdanubia.

Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2001.

Around Szekszárd a major city settlement cluster has formed (according to the Hungarian standard and notion system). The total number of inhabitants in the city and in the 15 agglomerate settlements is approximately 80,000.

Essential changes have been brought about in the connections between settlements by the radical decline in commuting. Beyond the actual decrease in numbers, the distances involved in commuting have also changed fundamentally. (The costs of commuting cannot be wholly funded out of an average Hungarian wage and if the employer does not assume most of these costs, the employee is unable to cover either medium- or, in particular, longer-distance transport costs from his/her wage.)

The reduction of commuting opportunities (partly due to the disappearance of jobs and partly to the rising costs of commuting) put, firstly, the inhabitants of villages and, to a lesser extent, those of small towns in a difficult situation. Large masses of people and special groups stayed at or returned home – unemployed.

In terms of South Transdanubia as a whole there is one specific area, as yet little more than topographical, but potentially of core importance later, which is the Pécs–Szekszárd–Kaposvár triangle. Within this triangle and in its direct vicinity nearly half a million people live – i.e. about half of the population of the region.

One of the three present county towns, the three most densely populated and functionally most developed settlements is accessible from the majority of settlements in the entire region in terms of time as well as of cost. (With the calculated development of internal transport facilities interurban transport connections can be strengthened and access times considerably reduced.) The broadening internal division of labour among the three cities and their deliberate, joint “external political activity” can be totally positive with respect to the whole of the region, particularly regarding the ability to attract foreign capital.

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THE ENVIRONMENTAL STATE, NATURAL RESOURCES AND ENVIRONMENTAL POLICY

István Fodor

The environmental state of the South Transdanubian region

The environmental state of the South Transdanubian region changes according to the quality of individual environmental elements, since the environmental quality and state of the region, apart from its natural environmental endowments, is primarily influenced by surface and environment use, with the damaging and polluting substances emitted into the environment, surface-influencing activities and the unfavourable effects on the quantitative and qualitative condition of the environmental elements.

Following the systemic change the emission of air-polluting substances, industrial water-pollution as well as the soil- and water-contamination caused by large-scale animal farming, chemical fertilizers and pesticides decreased owing to a significant drop in industrial and agricultural production. Nevertheless, the effects of subsequent mine closures and of the earlier activities producing dangerous waste on the environment must still be taken into consideration.

Apart from the few industrialised areas of South Transdanubia, the environmental state of a great part of the region was specifically protected from serious ecological degradation by overdue and backward industrial development. This is also substantiated by the fact that, with the exception of the Komló-Pécs-Beremend industrial area, the quality of the environment of the region appears to be quite favourable in many respects when viewed nationally. This might well stimulate new economic development initiatives from the private sector, the successful execution of structural change as well as the revitalisation of the region. Environmental conflicts, however, are not unknown in South Transdanubia and many of those can no longer be resolved using local

resources alone. In order to handle significant environmental problems regional resources are needed, and without these the resolution of such conflicts is also in the hands of state finance (e.g. the treatment and neutralisation of the hazardous waste produced and deposited in the region).

Air quality

Air quality in the region can be assessed based on the data from the measurement network operating in the various settlements. In those settlements and micro-regions connected to the National Emission Measurement Network the National Public Health Care Service regularly scans the concentration figures of free and precipitating dust (at 90 measuring points in Baranya, 2 in Somogy and 5 in Tolna) as well as of sulphur and nitrogen dioxide (at 38 measuring points in Baranya, 4 in Somogy and 3 in Tolna).

The air quality of the region can be classified as acceptable and more favourable than the national average on the basis of these emission figures with the exception of a few critical points. The origins of pollution in the region have industrial, traffic and communal origins, but polluting substances emanating from agricultural production also play a part. From the point of view of the human environment, the balanced climate of the region that lacks extremes, the economic stock of woodland and the micro-village settlement structure are all favourable. An exception to the latter is the area of the Pécs agglomeration and the southern shore of Lake Balaton which are laden with air pollution. The Komló-Pécs-Beremend axis is high in polluting substances of industrial origin, whilst on the southern shore of Lake Balaton environmental pollution due to traffic causes the more serious problems. These assertions are also verified by the geographical location of directly identifiable sources and premises polluting the air of the region. More than 20% of these directly identifiable sources of the region are located in the area of Pécs, while 78% of the total can be found in towns in general. A mere 22% of the directly identifiable sources polluted the air in villages. A spatial examination of the precipitated quantities of atmospheric sulphur and nitrogen oxide compounds also shows that the pollution level of the South Transdanubian region, with the exception of the Pécs industrial agglomeration, fluctuates around the national average or below. The precipitated amount of atmospheric sulphur compounds varies between 2.0 and 2.5 g·m⁻²·year⁻¹ but exceeds the 3.0 g·m⁻²·year⁻¹ figure in Pécs. The nitrogen oxide compounds yield figures which show a decrease from west to east, from 1.1 to 0.9 g·m⁻²·year⁻¹.

The greatest hazard is pollution from traffic since its scale is also dramatically rising in the South Transdanubian region. Between 1980 and 1990 automobile traffic increased by nearly 60% and traffic emissions by 57%. The main polluting substances emitted in 1990 were carbon monoxide, hydrocarbons and nitrogen oxides. These three components are responsible for 97 to 98% of air pollution from automobile traffic.

Sulphur dioxide concentration limits were exceeded only occasionally in the region between 1996 and 1998 – in Pécs and Szászvár. Nitrogen dioxide concentration limits were also exceeded only occasionally in the areas of Pécs, Kaposvár, Komló, Mohács, Szigetvár, Beremend and Szászvár. Based upon regular measurements it can be said that in the region moderately polluted air quality is characteristic of the air-space of Kaposvár, Bonyhád, Dunaföldvár, Szekszárd, Pécs, Beremend, Komló, Mohács, Siklós and Szászvár.

Water supply and water quality

Water supply in the settlements of the region shows a very heterogeneous picture. Whereas in Somogy county 221 settlements are supplied by water-works, temporary supply being characteristic of only 10 settlements, out of the 297 settlements of the more heavily industrialised Baranya 118 still had no water-works at the end of 1992. These are micro-village settlements, but it is a warning signal that clean drinking water is available to 50,000 people only to a limited extent (that is to say, a water supply with the help of tankers and inflatable water-carriers). In this respect the situation of Tolna county is best since here 108 settlements were already provided with piped drinking water by 1992. However, the scale of sewage in this same county hardly reaches 30%.

The increase in the role and competence of the local governments since the systemic change has resulted in changes for the better in the field of environmental protection within a short time frame (between 1989 and 1992). Rapid progress was made, for example, in the supply of clean drinking water to the settlements. Consequently, the number of settlements in a dangerous condition from a public health point of view was greatly reduced in the region and the population of all settlements was provided with clean drinking water by 2001. This is shown in the table below.

A general trend is a dramatic fall in environmental protection fines. The scale of effluent-related fines imposed in the region was reduced by 50% between 1980 and 1989. Also taking into account the aggravation of litigation, this trend implies a decline in the effluent problem of the region. However, we must be careful with judgements such as this since the pollution process has long-

term effects and no real, significant improvements can be expected for a considerable length of time. Owing to the environmental conflicts occurring in industrial areas, the effluent-related fines imposed on industrial plants are always higher than in agricultural areas. In Baranya the effluent-discharge fines imposed on industrial plants exceeded the fines of communal sewage treatment plants in every single case. Similar fines imposed on agricultural plants were reduced most significantly, by more than 90% in the region. This can be attributed to various factors. Apart from the economic regulators it can also be regarded as a positive phenomenon that the volume of sewage or effluent discharged into surface water is decreasing. At the same time forms of agricultural production are taking shape that are more environmentally friendly and less aggressive to the natural environment. The quality of sub-surface water also shows a heterogeneous picture in the region.

Table 1
Settlements with unsatisfactory drinking water supply from
a public health point of view

Denomination	1989	1992	2000	2001
Baranya county	187	89	0	0
Somogy county	57	20	0	0
Tolna county	21	1	1	0
Regional total	256	110	1	0
National total	725	243	18	13

Source: Environmental statistical data of Hungary, 2001.

Conflict situations caused by environmental noise

The harmful effect of noise causes conflicts for the most part in areas of traffic and industry. In the residential and holiday resort areas on the shore of Lake Balaton the damaging effects of noise are relatively widespread and the effectiveness of subsequent protection is not proportionate to input (measure to control traffic and public works). Damage occasioned by noise can most effectively be eliminated only at the planning process stage.

Waste

Waste formation is inseparable from production and consumption processes. The formation of solid and liquid wastes resulting from the production and consumption of products is a complex environmental protection problem and generates the most serious problems even in the economically developed countries.

The crude depositing of non-recycled waste occupies large and valuable pieces of land. Waste which is not treated correctly and which is not at least neutralised endangers the purity of environmental elements, usually contaminating the soil, ground-water, surface streams and the air. Its effect destroys the landscape and is unfavourable from settlement, public health and aesthetic points of view.

Waste is a source of strong conflict in settlements since the problem of its treatment is generally unsolved. In the three counties of South Transdanubia 2.2 million m³ of solid settlement waste are generated annually. The collection, deposition or neutralisation of communal waste can only be regarded as solved in but a few rather special settlements in the region (e.g. on the southern shore of Lake Balaton). Huge differences can be observed between the arrangements in towns and villages. The regular secure collection and transportation of waste is also a sanitary environment/public health duty that further increases the load on local authorities.

Apart from the clearly unsatisfactory arrangements of the villages a further environmental protection problem is also the large number and state of neglect of legal or illegal dumps which contaminate both the soil and ground-water. In this way, small settlements cannot even hope for a professional solution of their waste treatment problems in the near future. Due to the underdeveloped infrastructure this unsolved problem is one of the greatest potential threats to our natural environment. The conflict situation is only aggravated by the fact that these "unprofessional" waste collection sites were potential dumps for toxic or dangerous (industrial, oleaginous, etc.) waste before 1982.

The genuinely great sources of conflict, however, are the so-called regional toxic and dangerous waste dumps and treatment sites with their unforeseeable consequences. The region's own dangerous waste dump – established in the neighbourhood of Garé about fifteen years ago – became a real source of danger, threatening the whole of the population by the early 1990s. The Budapest Chemical Works stores approximately 15,500 tons of waste containing halogenous (chlorinated) hydrocarbons formed in the course of pesticide production here in about 60,000 steel barrels. The problem with the transportation and disposal of dangerous waste was solved by the turn of the millennium, but experience has shown that it is difficult to find a solution in such cases since the es-

establishment of a dangerous waste incinerator allowing final, complete neutralisation produces protest demonstrations in the surrounding settlements, just as the establishment of the radioactive waste dump in Ófalu encountered national opposition. (In the town of Paks, which is situated close to Pécs, there is the only one nuclear force of Hungary.) In merely the two counties of the South Transdanubian region (Somogy and Baranya) more than 68,000 tons of dangerous waste is produced on an annual basis, approximately two thirds of which is waste from abattoirs and leather-works. Today these not only cause strong conflict at regional level, since for the time being the problem of dangerous waste cannot be solved on a national scale either. Temporary dumps, however, can only mean a temporary solution. The only ultimate solution is the recycling or neutralisation of waste. The treatment of the problems by social consensus is much hampered by the extremely low level of environmental consciousness in Hungary, even though it cannot be ignored that dangerous waste requiring special treatment will produce problems for a long time to come.

These assertions substantiate the fact that the most serious environmental obstacle to the future economic development of the region is the unsolved problem of waste treatment.

All of this is evidence that in the course of developing the infrastructure and provisions of the region it will no longer be possible to handle the collection, treatment and neutralisation of solid settlement waste based upon the 'residuum principle' followed to date. An ultimate solution must be found with the help of already available technologies that can be operated systematically.

Natural resources of the region

The South Transdanubian region is rich in natural resources. These, however, were significantly re-evaluated in the structural transformation of the economy following the systemic change. This affected the Mecsek Hills, an area providing raw materials for the industrial sector, particularly dramatically. The Mecsek is rich in energy resources and minerals. Black coal was only mined here in Hungary and was an important source for the development of the region for one and a half centuries. All mines located here were closed at the end of the 1990s. The local uranium mines ceased to operate similarly. Revitalising the former mining areas has proved a huge cost burden for the state even today. Neither has the agro-ecological potential generated by very favourable soil and climatic conditions, which provide an outstanding basis for

agricultural production (the agrarian sector) created a truly efficient economic engine for the region.

Complying with the preferences of the European Union to promote economic activities closely connected with nature, the natural resources of the region suitable for different forms of economic development comprise the Danube, the Dráva, Lake Balaton, the national parks, landscape protection areas and nature reserves, the well-known health and holiday resorts and rich thermal water supplies. More than 10% of the area of the whole country that is designated as national parks are found in this region (the Danube-Dráva National Park and a part of the Balaton Uplands National Park). The background of the Danube-Dráva National Park is based on the area's 122 villages, whose social-economic activities are linked to the strictly protected natural values of the National Park in a highly symbiotic way. This connection greatly influences the way of life and subsistence of the more than 250,000 people who live here; and, in consequence, this connection also influences the social-economic development programmes laid down for the region.

Among the natural resources, water is of ever-increasing significance. It is, however, at least in terms of surface water supplies, very unevenly distributed in the region.



A channel of river Dráva at Barcs. Dráva is an unregulated river in Hungary. Its major parts are functioning as a natural state border.

(Photo by György Mánfai)

The supply-demand balance of water supplies

The water supplies of the South Transdanubian region are significant, although the concentration of demand shows significant differences in comparison to the location of the supplies. Three areas have emerged in South Transdanubia where the quantity and quality of water demand approximated to or exceeded natural water supplies. In the south eastern part of the region the continuously increasing water demand from the Pécs industrial agglomeration can be satisfied with the help of the regional pipeline connected to the Danube. The second such centre is the area of Kaposvár and the third is the holiday resort area along the southern shore of Lake Balaton. The water supply problems of Pécs are justified by its industrial water demand.

We can scarcely speak about natural exploitable supplies in the case of Lake Balaton, since lake control based upon the surface utilisation (mainly holiday) demands as well as the requirements relating to the maintenance of maximum and minimum water levels have seriously reduced the possibilities of water utilisation. Today, Lake Balaton and the Central Transdanubian Hills are significant water management research areas where changes in the amount of water brought to the surface in the mines constantly creates new conditions and changes in the northern catchment area affect the water supply management situation of the southern shore also.

In the southern catchment area of Lake Balaton large agricultural concerns have switched to spreading chemical fertilizers in the form of a suspension, which has resulted in a more favourable utilisation ratio of their effective ingredients and a decrease in the level of diffused pollution.

Through an analysis of the changing demands on surface water and a comparison of polluting substance concentrations in 1985 and 1990 we can note that the Chemical Oxygen Demand Dichromate as well as the oil and fat loads decreased significantly over the five year period examined. These favourable developments can be attributed to environmental protection investment. At the same time the changes in total dissolved substance and ammonia concentrations are not so favourable; they appear rather to have levelled off.

Large-scale pipe network laying, however, was not and is still not accompanied by the development of the sewage network in the settlements. More than 50% of flats or houses in the region's towns are connected to the sewage system, whereas the ratio falls significantly below 10% in the villages. Consequently the sewage from the houses provided with piped water but with no sewage facilities further burdens and contaminates both the soil and, through this, the ground water. As a further consequence of this process, which has continued for several decades, the ground water supply of the region can be considered regionally as polluted. The industrial water supply of the region shows major

distortions. A significant proportion of the industrial water consumption of the region falls to the more industrialised county of Baranya, which is struggling with a serious water shortage. The environmental conflict was deepened by the fact that most of the water-intensive industry was concentrated to the area of Pécs, and one extremely short of water.

Agricultural water utilisation can be broken down into two forms of utilisation. The water consumption of the large agricultural concerns mainly serves supplies to livestock breeding farms. The water demand for domestic and additional industrial activities is noticeably lower. Water supply is mainly served by privately owned wells, for the most part drawing from the water-table. In the case of the livestock farms which represent the main sites of water consumption, technological demand far exceeds that for watering, although that could also be satisfied by the less "valuable" types of water (e.g. ground water, subsurface water etc.) due to lower quality requirements.

Communal utilisation of energy and energy resources

From the point of view of regional development a secure energy supply is very important. Statistical analysis shows that, while industrial consumption does not increase significantly, communal use undergoes significant changes.

As a result of the notorious raw material and energy profligacy of the Hungarian economy that developed from the 1950s, communal consumption was not limited by either economic regulators or by environmental protection considerations. Today it has been scientifically proved that we must put an end to wasting energy on this scale, not only for economic reasons, but also owing to environmental protection considerations. The dynamic transformation of the structure of energy demand and energy resources must bring about fundamental changes in territorial utilisation also.

The region's power stations are operated exclusively by Pannon Power PLC (in Pécs and Komló); these are capable simply of supplying their close surroundings with electricity, district heating and hot water. In the towns there are generally only heating plants supplying thermal energy and hot water; these are usually fired by residual oil. If we compare the number of residential units supplied with district heating and piped for gas, we can see that out of nearly 1.5 million units a mere 60,000 are supplied with district heating. About 30,000 of these flats with district heating are located in Pécs, and the others are situated in other towns of the region. It is also striking that gas pipes are less characteristic of the flats in Pécs, they are more typical of the towns of Somogy county. In

the whole of the region, however, individual oil- and coal-firing determines which of these is also to be a significant source of air pollution in the town.

These connections are worthy of special attention since they are critical in the development of the region's infrastructure from the point of view of the quality of life. One of the fundamental elements of this is the replacement of low-efficiency, mostly coal-fired, individual heating systems with oil- or (preferably) gas-fired plant. As a consequence of this, however, the decreasing sulphur dioxide pollution of the area in question is replaced by nitrogen oxide pollution, the reduction of which is a major programme in Europe. Therefore, apart from emissions from vehicle traffic, it is specifically private heating arrangements that may become the main source of nitrogen oxide. This would explain the increasing nitrogen oxide concentrations already evident in towns and measured in the air in both winter and summer.

All of this demonstrates that in reducing energy resource consumption for heating purposes there is huge potential for the application of technological intervention and the development of special equipment. Using fewer energy resources leads to the emission of less air polluting substances – a factor that is most important in improving and retaining the environmental quality of the region.

Dilemmas concerning the efficiency of the regional environmental protection policy

Based upon an analysis of the environmental quality of the South Transdanubian region we may conclude that, notwithstanding its environmental conflicts, the region can be classified as one of the less polluted areas of Hungary. This favourable position also makes the region suitable to welcome new development strategies, which can accelerate the structural change process and enhance an economic upswing.

To achieve this, however, the region needs to demonstrate and elaborate an effective environmental policy which determines the environmental protection priorities of the region, drafts preventive environmental policy strategies and is capable of managing their implementation. In addition, it must be empowered when necessary to undertake effective environmental protection action – including the elimination of the sources of danger.

In the old economic system that prioritised the quantitative development of production there were hardly any forces challenging the application of techniques and technologies that polluted the environment. Likewise, few insti-

tutions were actually authorised to protect the environment effectively by legal means.

The diverse and rapidly worsening structural crisis of industry destroyed a number of companies that up to that point were regarded as seriously polluting the environment. The failure of the drive for quantity in industry was reflected in a significant drop in production as well as in corporate liquidations. This resulted in a reduction in emission levels simply by virtue of the reduction in output. The bodies drafting regional environmental protection concepts must start from the very basic fact that in the new situation aspects of environmental protection need to be emphasised and justified more effectively than ever before.

Several extraction sites and plants related to the material producing industries – as well as to those processing industries responsible for high levels of pollution – will either be shut down or heavily cut back, and in such a situation we must be prepared to find the means of handling the results of liquidation and downsizing. Just as sluggish industrial development may cause a number of production, human resource management, social and political problems, it can also have beneficial effects from the point of view of environmental protection. The alleviation of the environmental load is obviously unintentional, but nevertheless a tangible 'by-product' or result of industrial recession.

The decline of manufacturing industry, at the same time, also produces a very dangerous vacuum. The essence of the danger is that, in order to eliminate the unemployment caused by the closure of industrial plants, local authorities sometimes do not select their instruments. One of the important features of much of the working capital flowing in from abroad is that the techniques and technologies transferred into the economies of Central and Eastern Europe are often second-rate or outmoded, i.e. harmful to the environment. However important we regard the establishment of new jobs, the inflow of working capital and technological transfer, we must under no circumstances relax environmental protection regulations. In a newly elaborated concept we must attach particular importance to the aim that neither the region nor the country must become the environmental pollution backyard of the technologically more advanced countries.

The large-scale changes in ownership of the 1990s, most typically through privatisation, also often involve environmental protection considerations. The institutions and bodies responsible for environmental protection in the districts, regions or counties can now take more efficient measures against the now easily identifiable owners than before in order to eliminate harmful effects on the environment. Previously the state needed to take measures against its own companies which, in most cases, simply could not have been done successfully. In

the new ownership situation there are more means available, a more favourable legal environment and a more tolerant social context in existence.

However, we must also admit that the modernisation efforts based upon the fundamental principles of classical economics have so far proved ineffective, or at least they have resulted in a disproportionately low level of effectiveness in environmental protection when compared to the actual inputs into environmental protection. There is hope that we can overcome this problem and introduce an appropriate economic development strategy – although this is feasible in the long run only if economic reasoning accepts that the world economy is merely one subsystem of the global ecological system. This must be clearly established at national, regional and also at municipal economy levels. This requires the elaboration and implementation of totally new bio-economic models at regional and local authority level. This is simply due to the fact that these are the most mobile social, economic and natural spatial dimensions which can respond to the challenges of the increasingly serious environmental crisis most effectively.

In tailoring the environmental policy of the South Transdanubian region it must be taken into account that the natural endowments and resources of the region should be suitably adapted for environmentally friendly economic development – which may, in many respect, bear the marks of bio-ecology.

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TRANSPORT IN SOUTH TRANSDANUBIA

Ferenc Erdósi

The correlation between transport and geography

The geography/transport correlation within the region is fundamentally determined by its macro-regional location as well as by its spatial conditions and location in respect of significant international traffic flows. From this point of view two sets of circumstances are particularly relevant:

- The peripheral location in relation to the Balkans – exacerbated by both permanent and temporary geo-political factors – which has a direct effect;
- The relatively long distance from European transport's mega-corridors – which has a more indirect effect.

Both factors are totally or relatively new. Within the framework of historical Hungary – which extended over the whole of the Carpathian Basin – South Transdanubia was not a genuine peripheral area. In a paradoxical way, in the southern part of our region (across the river Dráva, which is both the natural and partly demographic border) transportation routes handling long-distance, international and inter-regional traffic in the direction of Croatia (specifically a part of the Hungarian Kingdom in earlier times) to the important Hungarian Adriatic port of Fiume (Rijeka) and towards Bosnia and Herzegovina, (also an important export market albeit under Austrian sovereignty) were more developed than those towards the east, that is, in the direction of the Great Plain even though this latter region lay within the country's borders.

The southern areas of our region, inhabited also by Croatian/Bosnian and Serbian nationalities, used to have close economic/cultural connections with the Balkans – which in some cases and in some periods exceeded the interactions established with the central regions of the country and Budapest itself in importance. From 1920 the southern natural border of the region became the official border and so considerably more difficult to

cross than before. Due to the unfriendly attitude of newly-established Yugoslavia and to introverted Hungarian politics the demand and rationale for transport to the south also weakened.

The new borders created by Trianon not only cut back north-south transit traffic (for the most part destined for Fiume) and two-way Southern Slav international transport to about one third of earlier levels, but they also reduced the river-borne freight traffic on the Dráva as far as Barcs (which had been extremely busy prior to World War I), to insignificance. Between the two World Wars, compensating for these weakened Balkan connections, traffic gravitated towards the north (largely towards Budapest) and in particular along the southern shore of Lake Balaton which became essentially one single resort belt after the building of Road no. 7.

For the population and for the economic and cultural actors of South Transdanubia, the southern border became completely impenetrable after World War II partly due to the physical destruction of the cross-border traffic infrastructure during the war (e.g. the demolition of the bridges at Barcs, Drávasztára and Drávaszabolcs and the dismantling of the I-track) and partly for political reasons. Ferry traffic on the Dráva and the Mura came to an end, mines were laid and a border zone was established which was only accessible to non-residents with special permission).

Although inter-state relations with Yugoslavia have by now returned to normal, the increase in two-way commercial, transit and (legal) small-scale frontier traffic has not yet been accompanied by developments in the transport infrastructure serving border crossings. The bridges at Drávaszabolcs and Barcs were only rebuilt relatively recently, in the 1970s (although there is no longer a railway line over the latter but merely a road). Even today there is still no bridge at Drávasztára, and ferries cannot replace bridges, even on an experimental basis, in the micro-regions.

In assessing the transport orientation of South Transdanubia, it is difficult to determine the relative significance of two negative factors. On the one hand, transport connections with the (still highly attractive) neighbouring Southern Slav regions (primarily with Croatia) are still inadequate. On the other hand, connections to the not merely economically important and more developed central regions of the country (and especially to the capital) are also unsatisfactory owing to the inordinate journey times involved. From the point of view of the region's peripheral location, the centripetal connecting force – not least to the political/social centre – has been most significant, but in a future 'Europe of the Regions' the connections to neighbouring, foreign regions (the better to exploit regional comparative advantages) could be at least as significant as those to the capital.

If we consider our geographical location from the stand-point of transportation and of the mega-corridors, it is a clear disadvantage for the region to be so

far from the Rhine-Rhône valley (Rotterdam–Marseille) super-corridor in the west of Europe. Additionally, the region is located far from the complex bulkproduct trade-route with the CIS countries along the London–Berlin–Warsaw–Moscow axis (especially since the opening of the Channel Tunnel and the unification of Germany) and even from the Hamburg–Prague/Paris–Munich–Vienna–Budapest–Belgrade–Bucharest–Istanbul corridor. To establish connections with several European countries the Danube, theoretically at least, has valuable potential as a waterway, although its exploitation so far has been minimal.

Changes in the modal split following the restructuring of the economy

Apart from general transportation requirements, the traffic profile of the areas (and in some cases international requirements), both the development and capacity of the transport (chiefly rail) network of South Transdanubia were also influenced by the demands of the various extractive industries (coal, stone, ores, gravel and oil). The Pécs–Mohács line was laid purely to carry coal and even the Pécs–Barcs–Nagykanizsa and the Szentlőrinc–Kelenföld lines were also laid, at least in part, in order to improve access to more remote coal markets.

Apart from agricultural products, which are also sold in markets outside the region, the most important production sites of the processing industry are also transport-intensive, since the overwhelming majority of their raw material requirements can only be purchased from distant regions. Due to the greater interregional shipping distances required by this peripheral location, the region's ton/kilometre performance is better than its simple weight performance.

As a result of economic-social transformation, the following structural changes are characteristic of transport in the region in the 1990s:

- Owing to the sharp decline in basic materials production, the complete suspension of coal- and ore-mining, the declining significance of the construction material industry and the drop in agricultural production, freight traffic decreased dramatically whilst passenger transport grew significantly within the overall traffic sector due to the fact that the majority of the population started to become more mobile. (The absolute and relative growth of passenger traffic is the result of a controversial process. The performance of public transport has deteriorated due to the fact that population numbers involved in commuting to work is only a fraction of

what it used to be, whilst the level of business and leisure traffic by car has exceeded preliminary predictions.)

- The change in the modal split, already visible in the 1990s, continued. Roads very rapidly attracted traffic from the railways, no longer merely in terms of short- and medium-distance passenger traffic, but with freight transport also (the latter including long-distance road haulage).
- As a result of the fragmented industrial structure of the economy, the transportation of smaller quantities of goods has become more important than the former pattern of bulk movement, whether in terms of passengers or freight and, in consequence, the proportion of smaller capacity vehicles within the national fleet has risen.

Provision of infrastructure and services in sub-branches of transport and network characteristics

Rail network – rail transport

The axes of the reticular network consist of the international main arterial lines which radiate from Budapest and which serve two of the three county towns of the region (Pécs and Kaposvár) as well as more than ten minor towns which are also served by InterCity trains. These are supplemented by secondary or branch lines (for the most part east-to-west) which link the smallest county town (Szekszárd) and other smaller towns with express trains and with the so-called 'InterPici' ('InterMini') passenger trains, which complement the IC service.

The framework created by these main lines used to be filled by branch lines. However, the extent of these, which had been laid more densely than anywhere else in the country, was greatly reduced as a result of track elimination culminating in the 1970s (in the first place in the southern peripheral area). In consequence, the density of railways in relation to the region (expressed as km/100 km²) is somewhat more unfavourable in the region than nationally. (Within the region, the figures for the counties show slight variations between 7.1 and 8.5 km/100 km².) Due to the differences in population density, the density of rail-track related to population (expressed as km/10,000 inhabitants) is more favourable in the region than in the country as a whole and the variations of the county figures are higher (between 8.8 and 13.8 km/100 km²). South Transdanubia is not as rich in main lines as the country as a whole and hence the capacity of the rail network is below average. Looking at main lines as a percent-

age of the whole, the railways in Somogy have the largest capacity (54%) whilst Tolna's network is the weakest (38.7%).

As a result of the elimination of branch-lines, the main railway junction of the region is no longer either the county town (Pécs) or the second city (Kaposvár), but the small town of Dombóvár.

In terms of the domestic demand, passenger traffic on the region's railways is determined by the geographical location of the major cities. The distribution of the traffic reflects:

- firstly, long-distance connections – together with those with Budapest – from the county towns and from certain other major towns,
- secondly, agglomeration connections.

The network intensity structure of freight transport, however, is totally different from passenger traffic: capacity differences are greater between main and branch lines, but the Murakeresztúr/Gyékényes–Kaposvár–Dombóvár–Budapest track which handles a great deal of international target and transit freight traffic is particularly remarkable among the main lines.

Among the cities of the region, Pécs generates significant inland freight traffic owing to its transport-intensive economy e.g. the power station, which is fired by coal originating far away.

Road network – interurban coach transport – service density

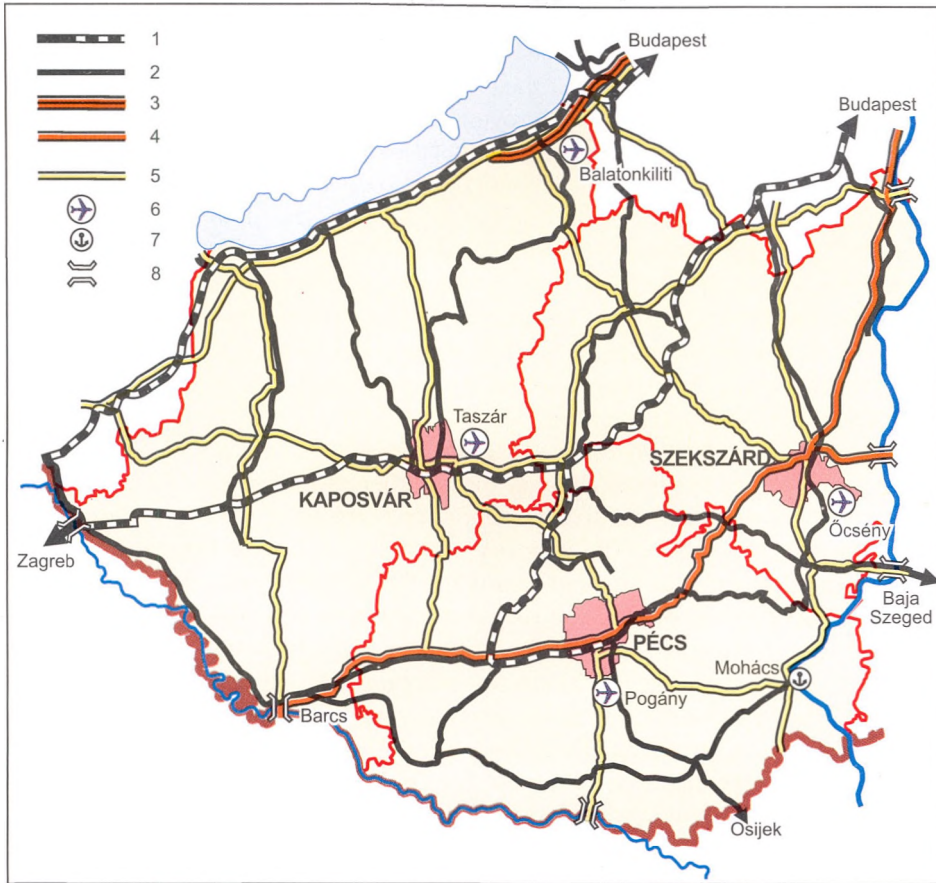
In Hungary, South Transdanubia has the least motorway of all regions (hardly 20 km in length) – and even that is on the shore of Lake Balaton in the direction of Budapest (see *Figure 1*). The main axes of the region's road network are the trunk-roads (Nos. 6 and 7) running more or less parallel to the Danube and Lake Balaton respectively. These handle international traffic and provide a direct connection with Budapest. Kaposvár is the only county town in the region that is not accessible by trunk road.

The chief role of the secondary roads is to connect the county towns and to 'bind' the other towns to these. This latter role, however, is no longer filled well by the "two-digit" roads since relatively insignificant, large villages have also been granted town status.

Regarding the hierarchical structure of the road network, the proportion of main roads depends on the extent to which the trunk roads that start from the capital and the secondary roads that function as transverse roads intersect. In fact, the situation of South Transdanubia is rather better in this respect than that of other regions. In Baranya with its peripheral location the proportion of main roads is significantly lower (15.5%) than in Tolna, which is nearer to the central region (28.7%).

Figure 1

Transport network of South Transdanubia



Key: 1 – Main electric railway lines, InterCity services; 2 – Other railways; 3 – Motor roads; 4 – First class roads; 5 – Second class roads; 6 – Civic airports; 7 – Main ports; 8 – Main bridges.

Source: Designed by the author.

It is characteristic of the region that in its secondary road network the proportion of minor roads is well above the national average, a factor to be attributed to the micro-village settlement structure.

The density of roads is largely determined by the structure of the settlement network and, owing to the high settlement density, the region's length of road per 100 km² is somewhat above the national average. In the three counties this figure is between 27.1 and 36.8 km/100 km².

Concerning the technical development of the road network, our region lags behind the national average in the proportion of fully paved roads. Their condition and maintenance level is average.

Nearly all settlements had been drawn into the interurban, long-distance coach transport network by the beginning of the 1980s and public transport is now only unavailable in a few of the dying villages which still remain – generally with 30 to 60 inhabitants. The regional intensity of coach traffic (passenger kilometre capacity per 100 km²) in South Transdanubia is close to the national average. Baranya can boast the highest figure owing to its large number of micro-villages. With regard to the number of journeys per inhabitant (i.e. 'coach mobility'), our region exceeds the national average. Again, Baranya is the first within the region, principally due to the strong concentration of jobs in the county town. For this large-scale and intensive passenger traffic the above-average coach fleet is adequate. (This, however, is still only 50% of the size of the former fleet, which had been tailored to mass long-distance transportation of workers in the times when mining was flourishing.)

The vehicle density on roads in South Transdanubia is above the national average. Since the systemic change, the number of cars per 1,000 inhabitants shows a slight regional equalisation tendency correlating with the income conditions within the region. The majority of the population of Pécs and Baranya have become somewhat slow in renewing the private car fleet as a result of structural changes in production (the disappearance of well-paid jobs in coal- and uranium-mining, in the building industry etc.), thus dropping from first place among the counties in 1980 to seventh place. At the same time the population of Somogy (chiefly due to its revenues as a holiday resort from Lake Balaton) and Tolna (from its diversified agriculture and small-scale industry) managed to make quicker progress. The above-national-average density of trucks indicates how widespread small enterprises are – whether naturally so or resulting from the break-up of larger enterprises.

Water transport – river-ports

In terms of the provision of a suitable infrastructure for water transport, South Transdanubia is quite well endowed in the Hungarian context since it is almost totally surrounded by navigable waterways (Danube, Dráva, Balaton, Sió). The rivers, however, are especially badly provided with port facilities for freight handling, which remains one of the main reasons for the under-utilisation of inland waterways.

On the Danube and the Dráva there is not one single port basin and the embankment at Mohács is little more than decorative. Only Mohács and Paks

have a railway connection. The majority of the so-called "harbours" are no more than primitive landing stages for occasional use. The traffic they handle is absolutely insignificant, ranging from a few hundred to 25,000 tons (Mohács) per year. Any cargo is usually low-value sand and gravel, chemical fertilisers and grain. Most river-ports, in fact, are used only for sporting and tourism purposes. Even so, the German, Austrian and French "botels" (hotel-ships) rarely tie up along the banks of the Danube in the region and foreign tourists usually only embark for Budapest.

Along the shore of Lake Balaton there are about a dozen harbours serving passenger vessels, which is essentially a tourist service. The ferry from Szántód makes it possible to cross the lake instead of driving around it, except in extremely cold winter periods when the lake is frozen. There are fewer German tourists since the re-unification of Germany and the number of domestic visitors has also dropped due to the high prices charged during the holiday period. In consequence the shipping capacity on Lake Balaton has also dropped – by one third since the 1970s. In this way, however, the balance between the available water traffic infrastructure on Lake Balaton and the demand for it has been more or less achieved.

Transport relations

International connections

On the basis of its location, South Transdanubia ought to be ideal for connections to the west and southwest, owing to their relative proximity. The international economic relations of our country have been reorganised since the systemic change in accordance with the 'cardinal points' and our western orientation now dominates. However, the region has failed to take all the opportunities of its relatively favourable geographical location since its international transport connections are anything but favourable; they are, on the contrary, inadequate due to underdevelopment, in particular in the eastern part of the region. This can essentially be attributed to the fact that the macro-structure of the national transport network, as a result of historical development, is totally radial – with the capital as the focal point and with a chronic shortage of large-capacity, cross-country transport routes.

With regard to accessibility in terms of both distance and time, South Transdanubia is closer to the international ports and economic macro-centres of the Mediterranean and the Balkans than to those of Western Europe and the ports of the North and Baltic Seas. However, access to the world's largest markets is

mainly carried out through Dutch and German super-ports, although there is somewhat less direct access through the two south-western main rail routes:

- first, to the western part of Croatia, to Zagreb and the largest international Croatian port (Rijeka) as well as to Split,
- secondly, to Koper via Slovenia (via Ljubljana and several other important industrial towns), or, alternatively, to Trieste and from there to many regions of Italy (to Rome and the southern container ports closer to the Suez Canal. In terms of passenger transport direct services are available with no change(s) involved to the South of France and to the Iberian Peninsula.

These south-western international lines serve a triple function as regards transport:

They belong to the northeast-to-southwest transit corridor which connects the Ukraine and other CIS countries, Slovakia, Poland and Italy via Hungary, although the significance of this transit route has diminished somewhat due to the diversion of traffic following the fall of the Soviet Union and to the construction of the new railway connecting the south-west corner of Hungary with Koper (Slovenia) in 2001. They also handle shipments relating to Hungary's foreign trade with part of the Mediterranean and with the overseas markets through the ports of the Northern Adriatic. (The source of Hungarian exports and the destination for imports is overwhelmingly Budapest, North Transdanubia and Eastern Hungary.)

They are also important routes for the flow of traffic within the framework of the Alps–Adriatic Regional Co-operation Agreement, i.e. between South Transdanubia, Croatia, Slovenia, South-East Austria and Northern Italy.

Although both of these lines belong to the main lines of the European trunk network, their technical-traffic capacity and performance fall significantly short of the other twin-track railway lines which dominate the international railway connections of Hungary (leading partly to Western Europe and partly to Eastern Europe). Over the past decade the electrification of their Hungarian sections and also (at least in part) of their foreign sections has improved their carrying capacities.

Compared to the south-western lines, the Pécs–Osijek line which has a smaller capacity and crosses the border at the south-eastern tip of the region plays a significantly less significant role. For the time being it handles only small consignments to and from the port of Bosnia and Herzegovina at Ploče and the two-way traffic that it carries is extremely small.

Up to the present day, a serious defect in the international railway network of our region remains the lack of a direct line to the west, that is, in the direction of Austria and Switzerland. As a consequence, traffic to Western Europe moves

in a rather circuitous way, by means of the Budapest/Székesfehérvár-Komárom–Hegyeshalom–(Vienna) line.

Railway lines going in the right directions and direct international trains cannot today be adequately substituted simply by “direct” passenger carriages ending up in such foreign destinations as Bratislava, Kosice, Cracow, Arad, Brasov and Sarajevo after an anachronistically long transit-time.

It is not unimportant in relation to international road connections that four of the routes designated as ‘E’ (European) highways which give access to the major economic centres both of neighbouring and more distant countries, together with sea-ports, all of which are so important to Hungary’s international economic relations do in fact cross the region. Of those, the northeast-to-southwest E 71 leading initially to Zagreb but continuing from that point in two directions is of the utmost international importance. For South Transdanubia it is primarily the “E” routes towards the Western Balkans and Italy that are directly accessed. Nevertheless, the region does benefit from this E route which crosses it and which is not Budapest-centred, but traverses the region, in that it runs along one edge of the country.

The E routes, however, do not represent one homogeneous quality and category of road, since only certain sections are motorways or dual-carriageways; more often they are primary, but in several sections they are no more than secondary, trunk-roads. Consequently, in assessing international road connections, the possibilities of linking up with the main international motorway network should be considered as the primary attributes with the highest value.

Access to foreign motorways, particularly those in Western Europe, from South Transdanubia is distinctly poor.

Graz and Eisenstadt in Austria are accessible by means of secondary roads of inferior quality. The motorway to Vienna is uninterrupted from Siófok via Budapest, but this involves a long circuitous journey. The accessibility of the motorways in Western Croatia and Slovenia which themselves make Italy accessible is rather more favourable by means of the primary trunk road. The eastern regions of the Balkans are accessible partly through the Zagreb–Belgrade motorway and partly through another highway network which touches Vojvodina in Serbia and then continues as far as Thessaloniki, albeit with interruptions, through Belgrade and Nis, but the available routes are rather long and are only suitable for moderate speeds.

- The Danube that constitutes the eastern border of South Transdanubia is one of the most significant waterways of Europe, crossing the continent from Rotterdam to the Black Sea through the Danube–Main–Rhine Canal, a transcontinental inland waterway route of arterial significance suitable for the passage of the 1,350-ton “Europe”-class vessels. In spite of this the level of usage is poor. There are several practical reasons for this, namely

- The river does not coincide with the main trans-European flow of goods,
- with the arrival of the post-industrial era the economic role of bulk products such as raw materials, building materials, energy sources etc.) all of which are moved more economically by water is declining, and for this reason the product structure of international cargos has changed significantly also,
- recent civil wars in the Balkans have hampered shipping for a long time and the wreckage from bridges destroyed or damaged by bombs still does.

For the time being, the anticipated traffic increase expected following the opening of the Danube–Main–Rhine Canal is not to be seen on the Hungarian section of the Danube. This high-capacity waterway, however, is marketing itself as international RO-RO (roll-on-roll-off) combined transport, a system that reduces the road transport element in the movement of goods. Currently the main player in this field is a Bulgarian-German joint venture.

On the Dráva, also an international inland waterway and navigable by vessels of up to 600 tons, there is no traffic at all between Croatia and Hungary, and vessels from both countries use it to a very limited extent for their own, local purposes.

- In South Transdanubia there never has been and is still no developed civil airport of international standard. Air traffic movements between the region and foreign countries (chiefly Germany) only occurs erratically and are limited to small aircraft – principally at a few small grass airfields (Siófok-Balatonkiliti, Ócsény, Pécs-Pogány) during the summer holiday season. Meanwhile, larger aircraft only use the concrete runways of the ‘regional’ airport at Kaposvár-Taszár (a military airport under conversion to a multi-user facility) for international passenger and cargo transport very occasionally.

Inland long-distance and agglomeration accessibility conditions

The quality of access depends partly upon settlement hierarchy and partly upon the distances and natural obstacles to be surmounted. In comparison to the European average, a remarkable proportion of the population of the country lives in the capital and its agglomeration. This is not only the determining centre for the country with a firm directional function derived from a strongly centralised executive authority, but it is also the centre of economic and cultural life. In consequence it ranks first in terms of traffic intensity and also first in terms of the inland transport routes of our region both with regard to:

- rail connections (track quality, rolling-stock, IC service, the scale of passenger and freight transport services) and to
- road connections (primary trunk-roads, the sole motorway hub, the scale of motor-vehicle traffic, the frequency and passenger numbers of coach services),
- the average travelling time from Pécs to Budapest is 3 hours by road and 2 and a half hours by non-stop InterCity train.



Dombóvár is a city bordered by three counties. Railway had an important role in the city's development. (Photo by György Mánfai)

Among the neighbouring regions, transport connections are the most intensive with Central Transdanubia (on the far side of Lake Balaton), with the Southern Great Plain (on the other side of the Danube but currently accessible by means of two road bridges and one rail/road bridge) and with West Transdanubia. However, the quality of access falls significantly short of that with the capital in respect of:

- the low service standard and poor utilisation of fast or express trains which operate exclusively on branch or secondary lines together with the dramatically reduced rail traffic and
- the no better than secondary roads, the moderate interregional road transport and the direct interregional coach lines (which do provide a modern service, but which are also too slow).

With the regions of the Northern Great Plain and Northern Hungary, however, there are no direct coach connections and rail access to Northern Hungary without changing is available only occasionally – and, in fact, is non-existent to the Northern Great Plain.

Within the region the most intensive public transport connection between county towns is that between Pécs and Kaposvár, recently enhanced by non-stop InterCity coaches. Of the other regional centres Szeged can be reached by the greatest number of coach services from Pécs.

The region's county towns are connected only with some 60-70% of the settlements in the counties under their administration and accessibility from the other settlements is complicated due to the need for changing. In this way agglomeration organisation is also imperfect.

Tasks, perspectives and space-related problems of transport development

Over the past decade the position of South Transdanubia compared to other regions has deteriorated spectacularly in terms of economic development (specific GDP figures, employment, wages, etc.). This backwardness cannot only be attributed to those burdens (environmental, social and welfare) inherited from the industrial society or to the shortcomings of the (already outdated) structural changes in the economy brought about by mining, the building-materials industry and extensive agriculture, but also to the adverse accessibility conditions which arise from the peripheral geographical/transport location. Complicated, time-consuming accessibility deters investors wanting to maintain close working contact with their plants by frequent visits or to base their raw material and finished goods shipments upon running-time or just-in-time systems which are sensitive to punctuality. Unfavourable accessibility, however, not only hampers activity within business circles (both producers and service providers), but that of participants in educational, scientific and cultural spheres and also in administration, since information communication tools cannot replace communication methods which need personal encounter, not to mention the 'physical' need for goods.

Consequently, the most important task is to develop a long-distance/international transport infrastructure sufficient to mitigate the problem of our peripheral location, and in particular to establish the Pan-European/TINA corridors which complement the TEN-T and are part of the Pan-European Network. After Hungary's accession to the EU in 2004 significant financial support for this can be claimed from the Cohesion Fund and from other

community sources. In this respect, however, planners are confronted with the awkward dilemma that the EU, in enforcing the new, explicitly environmentally friendly transport policy, prioritises railway construction and reconstruction and only subsidises motorway construction to a limited extent. In the present national network development plans, however, railways are of secondary importance and only involve reconstruction and modernisation, whilst great emphasis is laid upon completing the motorway network – which today is merely at a rudimentary stage.

Government programmes frequently change both in terms of content and deadlines but (controversially) agree with each other that radial motorways starting in Budapest and first directed towards the capitals of the neighbouring countries will be built. Two of these motorways or highways (sections of PEN corridors) will actually touch South Transdanubia. One of the two will have more political and financial support – the one which is likely to handle more traffic and produce greater international benefit, inevitably influenced by international relations considerations. In the wake of bad experience with the agency entrusted with the handling of the finance for such projects, finance will essentially be from central funds and loan capital. In this respect the prospects of the M7 (as a part of corridor PEN-V which leads to the Northern Adriatic ports and to the Italian NATO bases) being implemented are better. The time required for completion is less than that of V/c scheduled to cross the central, and in every respect problematic, region of the Balkans. This is the Budapest–Osijek–Sarajevo–Ploče corridor which, having the capital as its starting-point, will not now reach South Transdanubia even in the medium term. Local political forces are striving to have construction of the M6 (part of V/c) started from both ends simultaneously (that is, in the general region of Pécs also). The direct territorial interests involved in the two motorways sharply divide the economic/political actors of South Transdanubia. The inhabitants of the western part of the region and the real estate owners at Lake Balaton (mostly residing in Budapest) are lobbying for the M7, whilst those who live in the east of the region lobby for the construction of the M6 motorway. With such a split it is difficult to represent – and particularly to vindicate – pan-regional interests in any negotiations with central government or, from time to time, with the authorised deputies of the EU and with banks.

The construction of transverse routes can only begin after many decades, that is to say, after the completion of the central routes converging in Budapest. The most important of these is the M9 which will connect the Southern Great Plain with West Transdanubia.

The new bridge over the Danube at Szekszárd, completed in 2003, will only become a truly serious link with the neighbouring Southern Great Plain region if it does not merely create a short-cut between the main roads (nos. 6 and 51)

which run along the two banks of the Danube and meet in Budapest, but if it also plays a role as a genuine inter-regional link with the completed, full-length M9. In order to achieve a more balanced regional development, the Southern Great Plain, a backward region comparable with the northern parts of the country in terms of infrastructure, badly needs this. Only in this way would the two regions be able jointly to articulate their macro-regional interests (as the "Hungarian South") – that is, as a serious, rural area struggling with common problems.

The scheduled order of highway construction might produce the undesirable consequence that it merely strengthens the long-criticised mono-centric structure of the country, its capital-orientation and discordant regional development. The allocation of capital, quality labour force and other production factors to the radial motorways (the "pump effect"), partly by means of relocation from remote, rural areas, may have dual consequences:

- that the remote regions become empty and that, regional development differences will increase
- and that the established radial structure will not be able to be relaxed in the future since there will be hardly anything to be relocated to the transverse routes, i.e. it can scarcely be expected that the latter will produce any genuine impetus in regional development terms.

In order to reduce linear concentration along the corridors (the "tunnel effect"), subordinate parts of the road network suited for improving transport connections between the corridors and more remote areas must be developed to a larger extent than planned.

Much attention has been paid recently to the construction of regional civil airports – on the consideration that, during the long period needed to develop the motorway network, passenger and freight aircraft could replace motorways to some extent in certain areas of long-distance transport. In relation to the likely modest traffic demand in the foreseeable future, one single airport that made the neighbouring countries more accessible with medium-sized aircraft would be sufficient for the region for the time being. Regional/local interests, nevertheless, are also split on this subject and different solutions are preferred. The advantage of the Kaposvár version is that, as an airport also used for military purposes, it is more developed technically and is closer to the geographical centre of the region as well as to the international corridor railway-line actually in operation. Its disadvantage is that the number of potential air passengers in its confined agglomeration is clearly lower than that of the airport near Pécs, which is both the regional centre and a city of tourism and culture, and where, on the other hand, the basic infrastructure (e.g. a concrete runway) are only now being built. Although there is no public transport (rail or coach) service on

significant routes for long-distance domestic traffic (e.g. from Pécs to Miskolc/Debrecen), in this respect only the launching of an air-taxi service relying upon that small segment of those with high incomes can be expected in the future, rather than regular passenger traffic.

Apart from long-distance/international transport, the other problematic dimension of the region is how to provide sustainable transport in rural areas, in particular in the case of micro-villages. The present public transport (railway and coach) service in the fragmented rural settlement network connects the villages to the main transport network by means of numerous minor roads and of dreadfully tiring, outdated branch-lines. Huge buses run nearly empty and highly inefficiently and many unproductive scheduled stops necessitate circuitous routes due to the accessibility problems of villages located kilometres away from railway stations. This is extremely costly. Neither the state nor regional and local authorities are in a position to make up the overall losses of the service providers. Consequently, transport companies try to minimise the increase in their losses by reducing the frequency of services, which, on the other hand, is unacceptable to the population concerned.

The national railway company's (MÁV's) elimination of the majority of branch-lines – which handle a very small amount of traffic – is inevitable due to the insupportably heavy state subsidies. However, no government has undertaken such an unpleasant measure in the past two decades for political reasons (fearing strong protests on the part of rural population). This reluctance is also influenced by the unfavourable regional (economic-social) consequences of previous line-closures in the 1970s. The future maintenance of branch-line services by small regional railway companies can hardly be a real solution since the regional actors involved (local authorities, entrepreneurs and institutions) are totally unable to appropriate larger sums for this purpose. This is in contrast with many of the rural regions in Western Europe which are home to an organically developed middle-class and which have a substantially more favourable financial background. Since the number of villages in the region with a population of less than 130 exceeded 100 in the first decade of the 21st century (and dozens are inhabited by less than 50), large transport companies will inevitably withdraw from serving micro-settlements and so the mobility which is indispensable for many of the old and the young could basically be ensured by using minibuses put at the disposal of village mayors, providing occasional, flexible and "tailored" services rather than scheduled ones.

For the sake of a more favourable picture of public transport in rural areas, creating two-way connections with the road network for what we may term "dead-end" settlements has long been in progress but has obviously drawn more than necessary on scarce financial resources. In contrast to predictions, however, experience has recently show that, by first asphaltting minor, dirt

roads and then providing accessibility from more directions has not decreased migration from the villages or clearly improved demographic and economic conditions. It has been proved that technically adequate roads and other forms of infrastructure alone are insufficient to retain a population if these are not accompanied by other important and favourable economic and cultural development factors. This holds even true for "tele-houses" playing the role of a local "workshop" for the information society. Communications (transport and telecommunications) are only capable of fulfilling its settlement and regional development potential and becoming a genuine effective power if there is something to be regenerated.

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SYSTEM AND PRINCIPLES OF LAND USE

László Faragó

In Hungary utilisation and use of land is regulated by hierarchical physical plans. The national physical plan specifying the utilisation conditions of major territorial units and the system of technological-infrastructure networks of national significance is law by virtue of an Act of Parliament. The Act (Act XXVI of 2003), which was passed relatively recently, concentrates on the protection of environmental, natural and cultural values. With the passing of the Act, the long-discussed and basic questions of road and rail networks were brought into discussion.

At regional level there are no physical plans and so the regulations relating to the South Transdanubian region are determined by the plans worked out for the three counties jointly. The physical plans for the counties of Baranya, Somogy and Tolna which comply with the national plan agreed in the spring of 2003 have not yet been concluded, but their elaboration is in progress. The county plans are drafted by VÁTI, Public Non-profit Company for Regional Development and Urban Planning, the organisation supporting the work of the ministry entrusted with regional planning, and so they are clearly aligned with each other as well as with the national plan.

The settlement aspects of concrete investment and action are regulated in detail by the master plans. These master plans have been worked out on the basis of Act LXXVIII of 1997 on the Shaping and Protection of the Built Environment and on additional legal provisions furthering the execution of the Act (i.e., Governmental Decree 253/1997 on the National Physical Planning and Construction Requirements). Further means of physical planning include the settlement development concept and settlement master plan passed by resolution by the local government as well as the master plan and local construction statute enforced by decree. In South Transdanubia all major settlements now have master plans and the renewal and updating of earlier plans is also in progress. Investors who do not wish to conform to the established physical plan must calculate that any amendment to a decree actually in force, owing to the required conciliation and democratic decision-making processes, will take at the very least six months or even longer in practice.

The Act XXVI of 2003 on the National Physical Plan specifies the special areas of the country, and thus those of South Transdanubia, and also the related regulations. This Act does not cover those areas of South Transdanubia which border on Lake Balaton since these come within the jurisdiction of the Physical Plan and Statue of the Balaton Special Holiday Resort (Act CXII of 2000). The county physical plans - nearly finished, but not yet accepted - detail and apply these rules to the counties, at the same time adding further regulations.

The aim of accepting a national plan was to put a halt to negative regional processes and to provide a framework for the elaboration of lower-level plans for the sake of sustainable development. The National Physical Plan refers specifically to the following within its national regulations:

- the national ecological network (chiefly the Mecsek and the Zselic together with the areas along the rivers Dráva and Danube);
- those areas requiring complex landscape rehabilitation (in South Transdanubia the only such area is near Pécs, and involves carrying out work following the suspension of coal- and uranium-mining);
- highly sensitive subsurface water quality protection areas (mostly along the Danube and the Dráva as well as in the Mecsek and the Villány Hills);
- surface water, water quality protection and catchment areas (the shore of Lake Balaton and the sylvicultural areas as well as those designated for afforestation in the west of central Somogy county).

The map appendices of the National Physical Plan indicate these areas, but their more precise specification is the responsibility of the county plans.

The Act also lays down general rules for those special regional and county areas that need to be determined and for regulations to be made more concrete where necessary in respect of the lower-level plans. These areas are the following:

- protected nature areas,
- nature areas;
- ecological (green) corridors;
- areas requiring regional landscape rehabilitation;
- landscape protection areas;
- areas regularly flooded,
- flood-plains and areas permanently under water;
- areas susceptible to landslides;
- areas exposed to water erosion;
- areas exposed to wind erosion.

The National Physical Plan also designates new main road connections and improvements in South Transdanubia and the V/C corridor touching the east

of the region is also named in this Act. The spatial structure will not be changed initially by the highway developments along the border of the region, but by the developments crossing the region centrally from west to east and north to south, namely the M9 along the Nagykanizsa–Kaposvár–Dombóvár–Szent László Bridge (Szekszárd) route and by the M65 connecting the Pécs – Dombóvár – Tamási regions and thence running in the direction of Székesfehérvár. Unfortunately, any implementation of these projects can only be expected within the national road network development plan in the next decade.

The plan does not provide for an independent logistics centre of national significance in South Transdanubia, but only Mohács as a “Schengen” port and a sub-centre in Baja.

Nor does the plan settle the dispute over the airports of South Transdanubia a dispute which has been going on for a decade, although it does acknowledge the current situation by nominating Őcsény, Pécs-Pogány and Siófok-Balatonkiliti as being “suitable for development into commercial (international) airports” and mentions Taszár as an airport used for both military and civil purposes. It is obvious that in a region of this scale it makes no sense to develop four airports with similar aims and at the same time, but the people drafting and accepting the plan left the decision to the market.

The future of the county level plans depends upon regionalisation. If self-governmental regions are established according to the intentions of the present government and if micro-regions become administration entities in parallel, the counties together with their physical plans will be eliminated and the regions may be empowered to issue decrees and also to pass plans. If the towns are able to work out and pass their physical plans in co-operation with their surrounding settlements or at least through a conciliation process with them, it will become feasible to eradicate a number of current anomalies.

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THE ECONOMY OF THE REGION WITHIN THE HUNGARIAN SPATIAL STRUCTURE

László Hrubí

The South Transdanubian region is the smallest of the seven Hungarian regions in terms of population, its economic performance is average and the structural characteristics of the regional economy are typical in respect of the whole of the Hungarian regional economy. Apart from these features, the region is one of the most homogeneous of all Hungarian regions regarding the main features of the regional economy; the development way and prevailing characteristics, and the future of the three counties constituting the region are very similar and closely interconnected.

Being typical means that the spatial economic features, trends and effects of the region and of the three counties constituting the region are not, in fact, specific, but they do conform to the main spatial structure characteristics of the Hungarian economy and hence are more or less general.

The spatial structure of the economy (the territorial distribution of the performance of the national economy) is a slowly changing system that is usually not influenced by short-term factors and market fluctuations under normal market conditions. This kind of continuity in its development also entails that interventions which generally aim to moderate any lack of balance, regional backwardness or market opportunity inequalities deriving from social-economic causes can also only generate measurable effects and change in the longer term.

This permanence, the spatial structure with its virtually unchanged basic structure, is also characteristic of the development of the Hungarian economy in the 1990s, although the change of direction experienced at the beginning of the decade altered many of the determining factors – and on certain occasions somewhat radically.

At the time of the move towards a market economy the inherited economic spatial structure essentially appeared as the product of two major processes on an historic scale. One of these processes is historical development in the narrow sense of the term, which was in many respects halted by the other, the planned economic development that followed World War II.

In the historically developed spatial structure the dividing line used to be the River Danube which separated the more industrialised western parts (which largely followed European urbanisation trends) from the east of the country whose economic-social (and settlement) configuration was strongly connected to agriculture (*Figure 1*). The dividing line reflects typical spatial structure differences to such an extent that one of the possible formations in the division of the territory of the country into regions is the shaping of two macro-regions complemented by the capital, Budapest, as the third region and highly conspicuous in the Hungarian spatial structure.

This was the basis of the development zone of the socialist era, a southwest-northeast axis together with the area lying to the north of this. It is a significant difference, nevertheless, that while the earlier 'historical' development was a market-based, organic development calling into being a more complex regional economy – from a sectoral point of view – the development purpose of the socialist era built a largely monocultural regional economy operating in a system of giant enterprises. In consequence, this latter heritage became the industrial crisis zone in the Hungarian spatial structure from the beginning of the 1980s. Basically, structural change could only be introduced successfully in locations where there was something to be built upon, i.e. where it was possible to return to the 'historical development' as it were.

It is obvious that in the course of establishing the market economy in the 1990s those regions had a flying start which used to belong to the more dynamic zone in both earlier eras and which, of course, had not been made monocultural by the planned economy era. (The monocultural structure essentially meant the supremacy of heavy industry with an occasional supplement from light industry based on a female workforce).

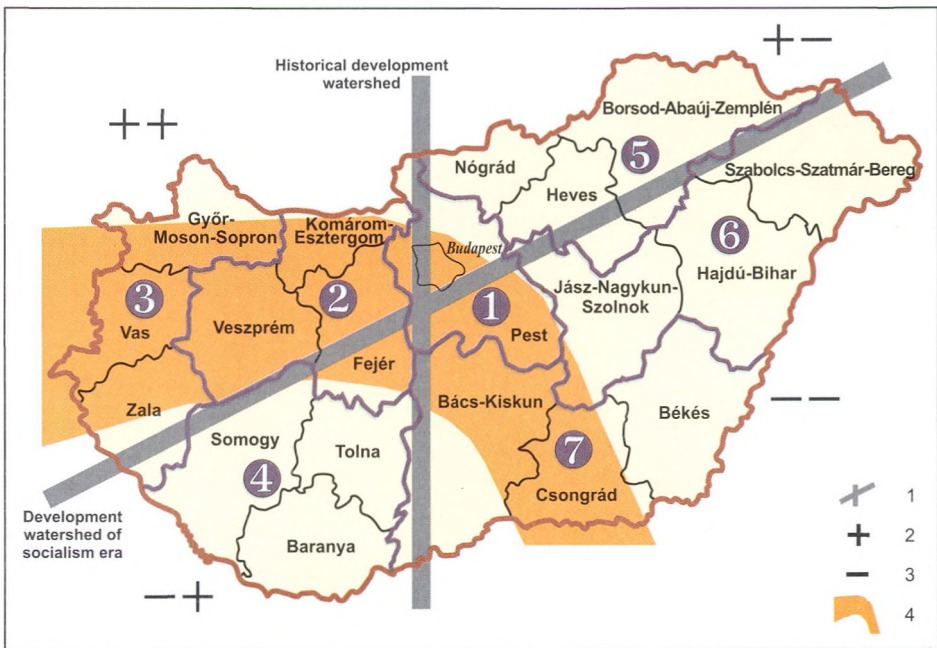
The economic heritage of the South Transdanubian region from the first phase comprises relatively highly-developed agriculture deriving from favourable natural endowments over large areas, with the closely connected food industry primarily satisfying local market demands and in so doing embracing nearly the whole spectrum, and a few branches of light industry (for example the leather, shoe, glove, textile and clothing industries). If we add to this that, from the second half of the 1920s coal-mining continuously gained strength and became an increasingly significant sectoral element in the Pécs area, the economy of the region, notwithstanding its geographical location, was closer to the 'Eastern Hungary' model in the economic structure sense, although this econ-

omy could have been based upon several companies with a European reputation. Nevertheless, the signs of social development and settlement structure developed together according to the Transdanubian model following urbanisation.

In the second, planned economy, phase which determined the economic heritage the economic development and structure picture of the region hardly changed, the economy of South Transdanubia was not given any significant role in this period in the centrally directed economic development.

Figure 1

Historical development zones of Hungary – advantages and disadvantages



Regions (NUTS 2 units): 1 – Central Hungary; 2 – Central Transdanubia; 3 – West Transdanubia; 4 – South Transdanubia; 5 – Northern Hungary; 6 – Northern Great Plain; 7 – Southern Great Plain.

Counties (NUTS 3 units): 19 and the capital, Budapest.

Key: 1 – Historical development axes; 2 – Advantages (winners); 3 – Disadvantages (losers); 4 – New development zone.

Source: On the basis of the figure in Faragó, L. 1999, p. 319.

The region's middle-of-the-road, somewhat indistinctive position has long been characteristic – and still is so. Naturally, certain branches of the economy or micro-regions in the region have appeared as targets for development, but these clearly did not primarily follow regional, but sectoral (or macro-economic) interests. Their not insignificant regional effect in fact only played a secondary role. A case in point was the developmental 'golden age' of the mining industry in Baranya, the development of the Lake Balaton shore and then, by way of a second step, the rehabilitation process necessitated by the environmental destruction from the development work in Somogy, and the construction of the nuclear power plant in Paks – with perhaps the development and industrialisation of Szekszárd as a counterweight in Tolna.

Several districts of the region have participated in a variety of regional equalisation programmes touching upon the economic development situation, for example the Dráva region (Ormánság) and the Zselic ridge in Baranya, the southern and western borderlands of Tolna (adjacent to the Baranya district and to the backward Somogy district, respectively), the district of Tab in Somogy. The efforts of more than two decades have for the most part proved ineffective in that they have hardly met the development potential of the economy or the most forced industry in either the short- or long-term.

This neither highly favoured nor totally neglected position had both positive and negative consequences after the dawn of the 1990s. No doubt the lack of a long-term strategy for selected (industrial) developments prevented spectacular collapses after the change of model in the region. Here there either arose only crises peculiar to the locality (or else the enterprises simply continued to survive in the economically backward areas). Nonetheless, it is clearly bad that such a large part of the region should have remained underdeveloped from the infrastructural point of view and that its economy should have relatively weak direct connections to European and world markets both in the physical and economic sense (such connections are at best achieved through intermediaries). Further, since the economy of the region and its local industry (with few exceptions) played no significant part in economic policy either before or during the first years of the new regime and since direct market influences were also felt less strongly, the region's adaptation to the new circumstances and to the transformation process was slightly delayed, and perhaps the forces concerned did not produce effects as strong as elsewhere.

In Hungary the change of model which had started at the beginning of the 1990s (along with its predecessors) was brought about under rather strange circumstances in relation to the direction and intensity of the region's economic structural change:

- A painstaking transformation of the sectoral structure – albeit with frequent setbacks – started in the mid-1980s and even accelerated at the end

of the decade in the period of so-called 'spontaneous privatisation', this process was not centrally state-directed (in particular in the field of trade and traditional services).

- The change of model was fundamentally fuelled by political objectives and, consequently, the transformation of socio-political relationships and toleration by the population inevitably curbed the radicalism of the economic transformation. This, naturally, was not for specific social or political reasons since the transformation was carried out in a world market environment suffering from recession. Furthermore, notwithstanding the extremely high level of revenue collected by the state and also the high degree of centralisation, the domestic profitability of the economy did not generate sufficient budgetary resources to finance a rational easing of social problems arising from the more radical changes.
- The demand for structural change occurred in parallel with the need to transform the ownership structure (i.e. privatisation) and to dismantle the collective organisational system, all of which compelled the government to engage in extremely complicated economic policy manoeuvres not tested elsewhere.
- The change of model also meant a change of paradigm regarding regional economy, since, in the earlier (centralised) model regional economic interests were at best reflected in employment levels whilst the vision of a democratic and decentralised society was looking towards a regionalized economy (and market) and towards autonomous interests in regional economic growth.

The short period since the turn of the 1990s can essentially be divided into two phases in respect of the objectives (and of the circumstances outlined above) of structural transformation. The watershed occurred during the years 1993–94.

The main characteristic feature of the first phase was an unavoidable but short-lived general decline – in spite of the introduction of new organisations and activities. Privatisation resulted in the sale of nearly half of total national economic assets, attracting significant amounts of foreign capital into the economy, whilst the economic structure was, on the surface, in transition – at least in quantitative terms. Two criteria can be highlighted to describe the crisis situation: several economic organisations went bankrupt and profitability simply collapsed. At the same time the unemployment rate soared and the unexpected boom had shock effects. The economic spatial structure picture of the first phase, therefore, is unsettled and should be viewed as temporary.

The main characteristic feature of the second phase is stabilisation (although at a lower level than before). This created an opportunity for growth following the new path: the still relatively high rate of unemployment started to decline

steadily and GDP per capita rose. The spatial structure of the economy became clearer and the combination of old and new factors, projected trends and regional development ways that appeared seemed stable.

The regional structure (spatial distribution) of the national economy is formed by territorial changes in its three fundamental elements, namely in its economic organisational structure and in its employment and economic performance values.

A relatively more balanced spatial structure is reflected by the density of companies (expressed in terms of their number per 1,000 inhabitants); the standard deviation is somewhat higher with regard to employment capacity (the number of employees per 1,000 inhabitants) and territorial differences are considerably more significant regarding economic performance indices and the attraction of foreign capital.

However, three comments need to be made at this point. First of all, Budapest stands out within the Hungarian spatial structure even in terms of the least diversified company density¹. Further, in connection with economic performance and the presence of foreign capital, there are not only significant quantitative differences between the capital and other regions, but a dual spatial structure is formed concerning regional economic development.

The second comment relates to companies. Genuine entrepreneurial skill and ability (and in many cases the will to survive) have broadened their scope, but the development of the organisational system ground to a halt in most cases after the foundation phase. Ownership and management are usually one and the same, in many cases even if the enterprise grows successfully. It frequently occurs that at this point the enterprise is divided and that the individual owner-manager is retained in both organisations. In consequence, no organisational development is visible (it is a rarity, for example, that a new or revived company is quoted on the stock exchange). The lack of organisational development is necessarily accompanied by the weakness of staff development. Most of the exceptions to this are joint ventures with foreign capital participation which, as a rule, are established from the outset as at least medium-sized enterprises. As a consequence of this stagnation of enterprise development, there is hardly any connection between the growth in the number of enterprises and employment outside Budapest. The correlation index between the number of companies and employees related to the population was 0.14 in 1995 and 0.24 in 2000 – ex

¹ In the case of most of the figures we do not even show Budapest or the Central Hungarian region which it constitutes together with Pest county, but merely Pest county separately, in order to demonstrate the differences between the other units more clearly. This is also the reason why we used the provincial rather than the national average.

cluding Budapest. (The situation is restored if we include Budapest – which may be the first factor of the dual nature of the regional structure – when the same figures amount to 0.71 and 0.72 respectively.)

The third comment relates to employment. The availability of jobs is the most sensitive question in all European countries and creating jobs is a primary development objective. This holds especially true for the countries in the post-socialist Central and Eastern European area. A consequence, when employment is targeted, is that it is often accompanied by deterioration in economic efficiency (or, generally speaking, in competitiveness) even in the course of regional development, even if only on a temporary basis. If over-employment cannot be sustained in a given organisation, the whole process starts again with new development action. At the turn of the millennium, however, it is happening more frequently that the social safety-valve role of employment is taken over by services and by community services based upon and financed by the national budget. However, due to the central state financing of these systems, their employment capacities are virtually independent of the economic performance of the given region. This is the other reason why territorial differences between the employment capacities of individual regions are significantly smaller than those between their economic performance figures.

In the light of the above, it cannot be regarded as too significant that the South Transdanubian region boasts a favourable position in terms of both company density and employment capacities under countyside circumstances (*Figure 2*).

The position of the region is firstly determined by the county of Baranya and the city of Pécs which together hold about one sixth of the population of the region. Above we discussed the Budapest syndrome in connection with the Hungarian spatial structure and, in respect of the South Transdanubian region, the same can be said about the relationship of Pécs and the region – with somewhat different characteristics. The economic rise or decline of the region has always been, and will probably always be, greatly connected to the current economic power of Pécs partly due to its historical importance and partly to the spill-over effects in terms of the economic relationships of the city. The relative homogeneity of the region mentioned in the introduction can mainly be attributed to this.

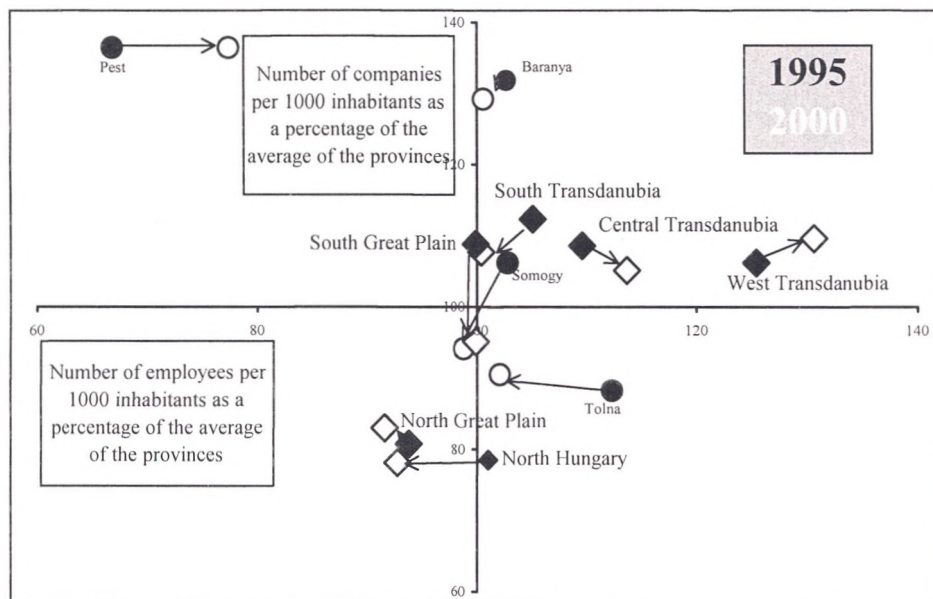
However, the favourable organisational system and employment position of the region is not an unequivocal advantage in relation to its background structure.

The distribution of companies according to the number of employees appears to be even lower than the provincial average, displaying an entrepreneurial sphere with a fragmented pattern (*Figure 3*). In 2000 only 8.7% of all enterprises employed more than 10 people and 41.4% had no employees at all.

Again, the regional average is determined by the county of Baranya and Pécs with 63.5% of the companies operating in Baranya.²

Figure 2

The number of companies and employees per 1,000 inhabitants as a percentage of the provincial average, 1995 and 2000³



Source: Regional Statistical Yearbook, 1995, 2000. Budapest, Central Statistical Office (different pages, calculated by author).

² This cannot be proved with data, but the probable reason is the character of Pécs as a historical intellectual centre and the (related) above-average proportion of people completing higher education studies (white-collar workers). Intellectual activity (both expert as well as intellectually creative) is exploited in both employment and independent market activities but is rarely accompanied by employment. The situation is probably analogous with that of Budapest where 94.5% of the companies employed less than 10 people in 2000 and 49.3% had no employees at all.

³ With regard to the density of companies, Budapest showed 324.9% of the provincial average in 1995 and 312.7% in 2000 (the average of the Central Hungarian region including the capital was 254.4% and 248.7%, respectively). Concerning employment capacities, Budapest represented 174.1% of the provincial average in 1995 and 172.8% in 2000. The figures for the Central Hungarian region were 137.6% and 138.2%, respectively.

Figure 3

The distribution of companies according to the number of employees (%), 2000



Source: Regional Statistical Yearbook, 2000. Budapest, Central Statistical Office (different pages, calculated by author).

The other internal factor weakening the position of the region is linked to the structure of employment. In the region 29.7% of employees worked in state administration, public education, public health and other community (i.e. typically budget-financed) services sectors in 2000. The Hungarian provincial average amounted to 27.5% at this time (the national average being 30.9% due to Budapest), but this ratio only reached 22.4% in the most dynamically developing region, West Transdanubia (the others were employed in the economic-market sphere in a narrower sense).

The third factor showing how relative is this apparently favourable position is the direction (and scale) of change itself – also indicated in the *Figure 2*. The direction and also (approximately) the intensity of the changes compared to the 1995 situation fit into the peculiar 'development slope' of the Hungarian spatial structure.

Firstly, there is a growing gap between the capital and the country (to such a degree that Budapest can hardly be plotted within the same system of coordinates). Secondly, the difference between the West and Central Transda-

nubian regions (which show dynamic regional growth) and the other four provincial regions is increasing. In this spatial structure trend, however, there is one factor worthy of mention: statistics show that, until 1998, regional differences – mostly measured in specific GDP terms – increased in such a way that the difference between the capital and the six provincial regions became larger. At a later stage, however, increasing differences were shown by the growing gap between the different provincial regions. Consequently, the indices of the West and Central Transdanubian regions drew closer to those of the capital, whilst the figures for the other four regions increasingly fall behind.

This tendency is clearly shown in the development of regional economic performance and capital attraction ability, that is to say, in the results of the functioning of the economic organisational system and employment described above (*Figures 4, 5 and 6*).

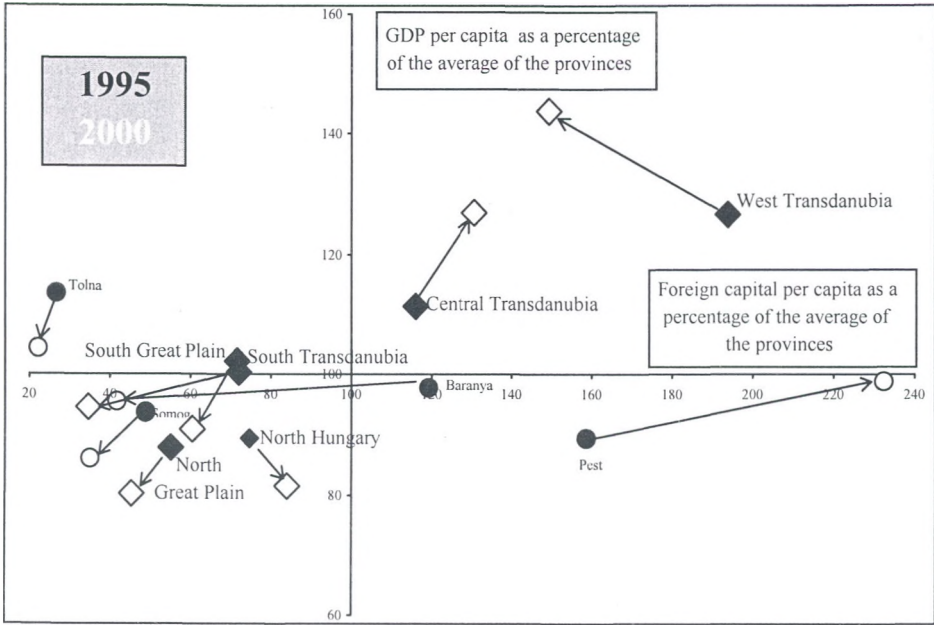
The main operating characteristics or, in other words, the main problems of the economy of South Transdanubia can be outlined relatively clearly on the basis of the figures.

In the second half of the 1990s the economic growth of the region ground to a halt whilst the more dynamic regions produced higher growth rates. Looking at the position of the region on the basis of GDP per capita, it has declined from a position slightly above the 1995 average to a level close to that of the regions considered to be lagging behind at an earlier date. GDP, on the basis of its trend can be considered as stable and well-balanced – not characterised by short-term volatility. Consequently, the regression in South Transdanubia matches the trend.

If we examine more closely the drawing shown in *Figure 4* we can recognise a widening gap (the diverging arrows show changes in time) in the development of the national regional structure on the basis of specific GDP: Budapest has been substantially 'above the line' for a relatively long time, the dynamically developing Central and West Transdanubian regions are also close to take-off point, whilst, regarding the speed of development, the other parts of the country fall further and further behind, revealing an ever-greater gap in terms of development. One of the most important reasons for the growing differences in development is that the Southern Great Plain region and, particularly, the South Transdanubian region, which occupied a median position on the development axis at an earlier point, are now approaching those classified as lagging behind. This is the reason for the change mentioned previously – that by the end of the decade a polarisation of the Hungarian regional structure had occurred, brought about by varying regional performance rather than by the earlier divergence of Budapest from the provinces.

Figure 4

GDP and foreign capital per capita as a percentage of the provincial average, 1995, 2000⁴

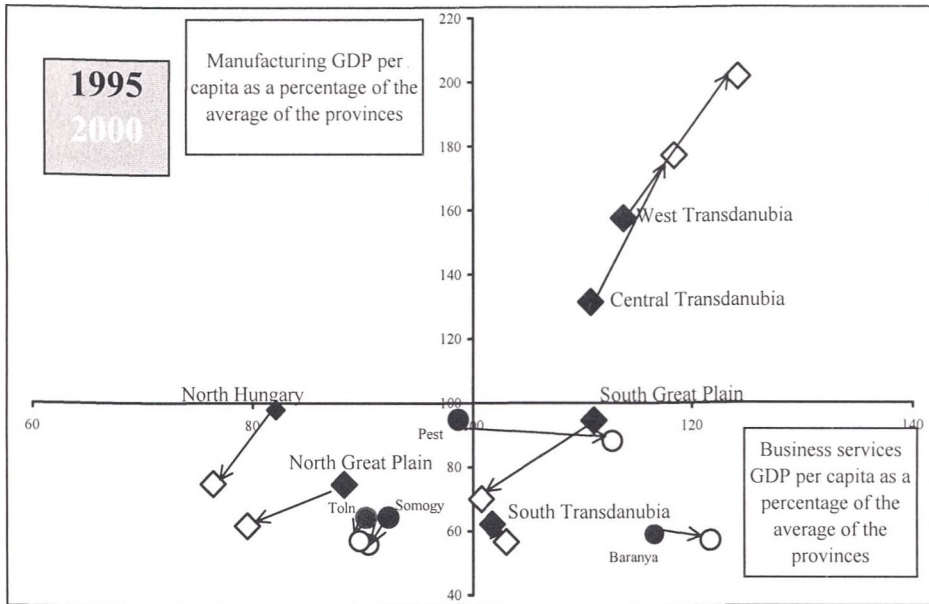


Source: Regional Statistical Yearbook, 1996, 2001. Budapest, Central Statistical Office (different pages, calculated by author).

⁴ Foreign capital per capita in Budapest amounted to 5.9 times the provincial average in 2000, whilst the average including the Pest county was 4.6 times higher (in 1995 the figure for the capital was 5.53 times and that for Central Hungary 4.18 times higher). Regarding total GDP the shortfall of the Central Hungary is smaller: in 2000 it was 192.2% of the provincial average (while in the case of Budapest it was 246.5%); in 1995 the relevant index for the region stood at 177.6% whilst that of Budapest was 222.6%.

Figure 5

GDP from the processing industry and financial-business services per capita as a percentage of the provincial average, 1995 and 2000⁵

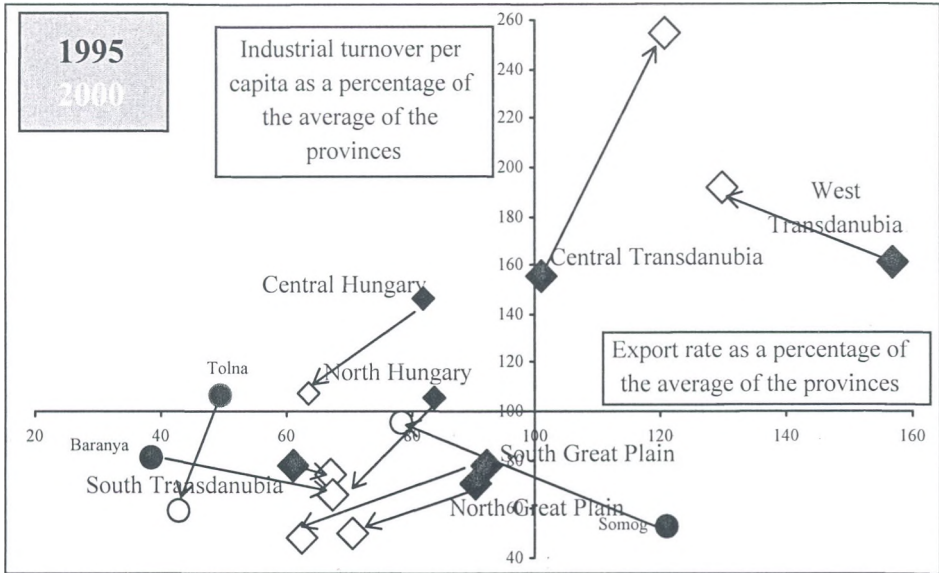


Source: Data from the Ministry of Economy, 2002. (Calculated by author).

⁵ In the case of Budapest processing industry GDP per capita in 2000 was only 19.4% and that of the region merely 8.1% higher than the provincial average (in 1995 these figures were 134.5% and 121%, respectively). However, in relation to business services GDP the figure for Budapest was 5.21 times higher (in 1995 4.49 times) and that for the region 3.73 times as high (in 1995 3.31 times).

Figure 6

Industrial sales revenues per capita and industrial sales exports as a percentage of the provincial average, 1995 and 2000



Source: Regional Statistical Annals 1996 and 2001. (Various pages). Budapest, Central Statistical Office. (Author's own calculation).

Taking into account the other characteristic feature of *Figure 4*, we can clearly see the connection between the presence of foreign capital and specific GDP (the correlation coefficient, including Budapest was 0.91 in 2000 and 0.63 excluding Budapest – in both cases showing a 0.04–0.05 decrease compared to 1995). The transition economies almost inevitably suffer from a lack of capital and consequently the widening of the gap in Hungarian regional development is also mainly due to variations in the availability of capital – with a certain delay.

In relation to South Transdanubia a lack of attractiveness to capital has been one of the reasons for the tendency to lag behind since the middle of the previous decade. This lack of attraction for foreign capital cannot be offset in any region by a supply of domestic capital since one of the main problems lies in the economic organisation system – namely, the extremely low level of development of organisation and personnel. Capital accumulation among the present

economic conditions can only increase productivity in the presence of advanced organisational and personnel frameworks.

One further comment should be added to this network of connections. The capital – GDP – development – organisation connection can be stressed by the fact that in 2000 the correlation coefficient between the employment capacity (the number of employed per 1,000 inhabitants) of the regions including Budapest and specific GDP is 0.93, and excluding Budapest 0.86, showing in both cases a minimal increase. This means for South Transdanubia – and for the whole of the Hungarian economy – that today even to think about opportunities for quantitative growth is outdated. It is not the creation or the incubation of new enterprises which is important but the strengthening of existing organisational systems and the speeding up of their development. By way of conclusion, what is required is an increase in the economic performance capacity and, from another standpoint, an increase in regional competitive capacity: in other words, a switch to qualitative growth.

Figure 4 shows that each of the three counties of South Transdanubia presents the same picture increasingly in this connection system. Tolna county was earlier defined by the presence of Hungary's only nuclear power station within its borders, representing a disproportionately large asset in relation to the county (generating almost one quarter of the county's GDP itself). In the case of Baranya the existence of Pécs and its agglomerative effect in performance can be mentioned. Since, for one half of the decade, the growth in the Hungarian economy as measured by GDP has increased dynamically, these factors earlier considered unique have inevitably lost their real value which lay in detailing – even in adding colour to – the complex regional situation.

Taking into account other characteristics, of less importance but similarly unique, we can say in respect of the economic performance of the region's three counties that this was characterised by homogeneity and by homogeneous relative underdevelopment which suddenly became evident when faced with a higher growth rate. From this point of view also we return yet again to the same conclusion – namely, that the turn of the millennium has become the period of qualitative growth and that this picture may be modified in one or two particulars although to a very limited extent.

The sectoral structure of the regional economy has had a dual character in Hungary since the mid-'90s. In Budapest, in the initial period of privatisation (mainly state-controlled) there took place a 'clear-out' within the economic structure. This meant first of all a moving out of those industries which did not fit the development concepts of the metropolitan area and secondly the application of the resources released by this to the tertiary sector with the provision of services, including finance- and business-related services, becoming dominant. To some extent this was augmented by (in Central East European terms) a

cross-border role. Since the potential created in this way is capable of serving the market over a fairly wide area (particularly in the case of a country poor in economic and social welfare terms), the development direction of the provinces has been defined rather by the processing industries. For the time being the routes of these two dynamic sectors have split in the regional economy: the financial-business services have been concentrated from a regional point of view, and manufacturing been decentralised. The changes described in *Figure 5* suggest that this separation will slow down at a higher level of growth: that a theoretical balance will be achieved in which manufacturing will create the market demand for the financial-business services, with the two sectors growing together in the modern, dynamic regional economy.



The townhall of the only of *Kaposvár*, which is a dynamically developing centre of Somogy county.
(Photo by Róbert Lang)

It is a constant problem of the sectoral structure of the regional economy that in terms of performance of the processing industry South Transdanubia region has for a long time belonged to the less developed regions of the country.

Earlier this meant only a difference in the sectoral structure of the regional economy, but nowadays it has an effect influencing the growth of the entire, complex local economy. Firstly, the processing industry is the primary carrier of economic innovation, and its absence means a lack of the requisite capacity to receive innovation. Secondly – on the basis of the above – sluggish growth in the processing industries slows down the market demand from the tertiary sector (within which, once again, the demand for financial-business services retards their growth). The potential for regional economic growth today pri-

marily depends on the economic structure, and, therefore, the other key terms in the regional regression are the deformity of the sectoral structure and the weakness of the processing industry in the region.

It would appear to be a characteristic feature of South Transdanubia that, in spite of the existence of these linkages as discussed above, it can retain its relatively good position based on its performance in the financial-business services area whilst its performance in the processing industry appears continuously weak. This situation is again due to Pécs, and the situation is basically the same as in the case of that typical of the earlier period and which was measured in GDP terms. In the provinces financial-business services are at a lower level of growth (mainly because of the dominant strength of Budapest) where the influence of the unique characteristic features can be more important. Pécs (but also, for example, Szeged in the South Great Plain region) is considered to be an important sub-centre in the financial-business sphere with southern cross-border influences for both economic and non-economic reasons (mainly in the financial and property market sub-sectors) and this – presumably temporarily – can compensate for the lack of market demand brought about by the weakness of the processing industry.

Due to the low thresholds of the economy of scale the Hungarian economy has a limited domestic market and a strong export orientation is necessary. Consequently the growth of the Hungarian provincial economy depends not exclusively on the growth of processing industries in general but rather on the growth of export-oriented processing industries. (The GDP performance of the processing industry and the industry's export rate have a calculated connection coefficient for 2000: including Budapest 0.82; excluding Budapest 0.86, both of which show an important increase compared to 1995).

It is, therefore, not surprising that among all of the figures, *Figure 6* demonstrates the widest regional gap in the national economy (In addition to this, Budapest and the whole of the Central Hungarian region can be included in the picture, in a position slightly above the provincial average due to its rate of exports, a factor which obviously derives from the different growth line of the capital).

From the point of view of industrial export capacity – and the industrialisation analysed earlier from a different perspective – South Transdanubia's position is formulated on the basis of the previous viewpoints and situations and it has assumed a position among the 'laggards', albeit in the upper third. The connection is self-evident: the underdeveloped processing industries cannot produce a stable export performance.

By way of conclusion, the South Transdanubian region – primarily as a consequence of the temporary survival of the former development – occupied an average development position in the middle of the 1990s. In the second half of

the decade, however, it could not adjust itself to the new requirements, mainly due to the accelerated growth process which had quite different factors and characteristic features – and, therefore, it continuously lagged behind the dynamic regions. This is primarily due to the problems of the economic structure: the inherited, weak industrialisation could not provide a sound enough basis for an expansion of domestic processing industries (and, in particular, of export-oriented ones). The same reason, although on a larger scale and emanating from the geographical position of the region and its relatively poor physical accessibility – has not aided investment from outside and the region shows a weak capacity for capital attraction (even though various factors have temporarily hidden these weaknesses). However, in this new period of growth this lag has become very evident and even tendency-like.

The elimination of these problems and re-industrialisation in a modernised form which matches the contemporary economic and market trends, could mean that the region finally does take off. Despite from the weaknesses experienced today, the appropriate conditions for such modernised reindustrialisation are either provided or can be created in the short term.

The main indicators of modernisation and the current trends of the regional economy can be stated as follows:

- economic growth and development heavily rely on the self-development of enterprises operating on a market or business,
- adapting a growth and export-oriented strategy which is the basis for the intervention of regional development policy and which relies on the utilisation of innovation and internal value-creating capacities,
- the knowledge-based economy, technologically developed processing industries and financial/business services are the dominant factors from the point of view of the economic structure,
- the organisational background to development is provided by network systems and institutions,
- the global system of development and developing is tailored by the conditions of globalisation and regionalisation.

According to this the regional economic development strategy's focal points in modernisation are as follows:

- the creation and development of economic clusters,
- the creation and development of economic and economic institutional networks (e.g. industrial parks, a logistics centres, enterprise zones etc),
- the development of R&D organisations and of innovation,
- the factors assisting competitiveness (eg. quality control management, design etc) or the spread and development of a variety of economic sectors and activities,

- the development of business services and financing of regional development.

Taking all of the above into consideration and building on local capacities (e.g. important but currently dissipated entrepreneurial organisational potential, a city centre with developed cultural and intellectual potential and a workforce better qualified than the average) three potential directions can be conceived for the reindustrialisation process to be fulfilled with the help of the organisational systems created within the culture, health and environmental technology industries – which involves at the same time the modernisation of the regional economic structure and keeping up with new market conditions and trends.

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THE POSITION AND DEVELOPMENT OF SERVICES

Zoltán Raffay

Although Transdanubia as a whole seems to be better developed in most economic indices than the rest of Hungary (apart from the Central Region), South Transdanubia lags behind the other two regions of Transdanubia (West and Central) and is situated around or even below the national average in economic respects. This is also true of the services sector.

The service sector in Hungary

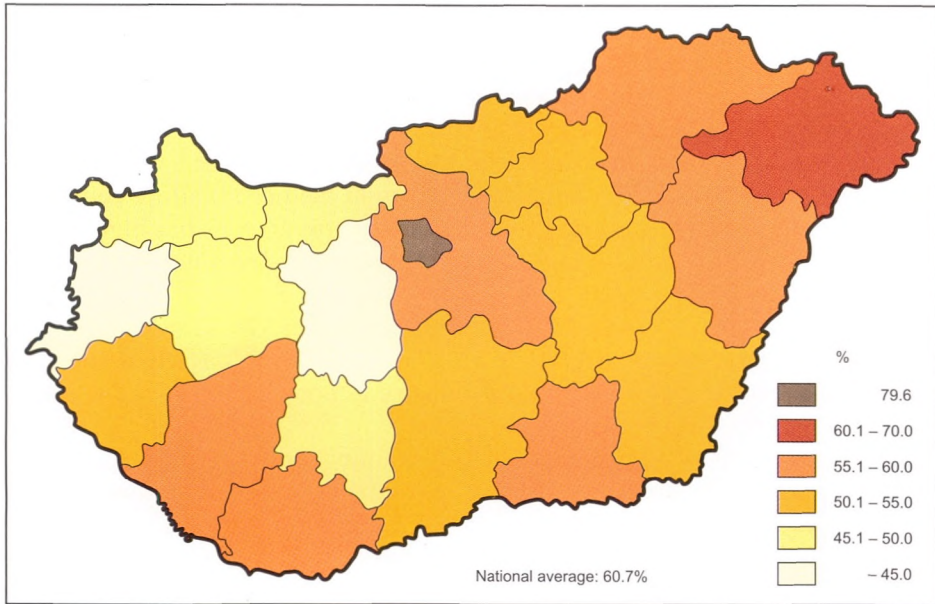
After the systemic change – that is, from 1992 to 2001 – the proportion of all active earners who were employed in services grew from 53.3% to 60.7% in Hungary as a whole, and when we show the tertiary sector as a proportion of total employment by individual county on the map of Hungary (*Figure 1*) a striking west-east discrepancy can be seen between Transdanubia and the eastern parts of the country. The east is where the ratio of services employees is at its highest and the western counties (which produce the highest amount of GDP and have the lowest unemployment figures) appear to have the weakest tertiary sector. (The latter are the most industrialised counties or at least those counties where the decline of industry was the least severe). In the eastern counties, however, it is usually the less effective and less well-paid community and consumer services that prevail and certainly not business services.

On a world-wide basis the most dynamically growing sub-sector and that which determines regional development the most – i.e. advanced business services – still has a somewhat weak position in Hungary. In the advanced market economies approximately one-tenth of all employees work in these ac-

tivities, whilst in Hungary only Budapest reaches this figure (half of all those employed in business services in Hungary work in Budapest), and the national average calculated with the inclusion of Budapest approaches this. However, if we exclude Budapest, only 5.1% of the total Hungarian labour force are employed in business services – only half of what should be the desirable figure. With regard to the spatial distribution of the counties that are “strong” and “weak” in business services employment, the same west-east division can be seen as in the previous case, but it is those counties in the western part of Hungary (east of the Danube River) which usually have the higher business services employment ratio, the eastern counties being weaker in this respect.

Figure 1

The proportion of tertiary employment in the counties of Hungary in 2001



Source: Statistical yearbooks of the counties by the Central Statistical Office.

The service sector in South Transdanubia

In *South Transdanubia* the figure for *tertiary employment* was below the national average – only 58.3% – in 2002, although the region is far from being homogeneous in this respect. With regard to the individual counties of the region, in *Banya county* the weight of tertiary employment – i.e. 60.5% – is almost identical to the national average, the 61.4% of *Somogy* slightly exceeds (due mostly to well-developed tourism functions), whilst *Tolna* is the most backward county in the region with extremely low tertiary employment at just over one half, i.e. 51.3%, of the total workforce.

Pécs is the centre of the region and also the most important regional administrative centres not only of South Transdanubia but also of Hungary. The cultural and educational functions of the city are outstanding: a university with a very wide range of faculties, several museums and monuments from all historical periods. Although much of the industry of Pécs disappeared after the systemic change, the service activities of the city could compensate for much of the loss. Not only is Pécs popular with both Hungarian and foreign tourists but the county has some well-known tourist resorts also, some of which have international recognition (the medicinal spa of Harkány or the lakes of Orfű).

In *Somogy county* the tourist sector (mostly along the southern shore of Lake Balaton) is famous not only in Hungary but also in the neighbouring countries. The dynamically growing centre of the county, Kaposvár, now has higher education functions itself, and some institutions of regional development have also settled in the city.

Tolna county has the weakest economy in the South Transdanubian region and the smallest county town in Hungary. The service sector is mostly restricted to public administration and to basic social services, although the town has some higher education functions also.

If we examine the position of South Transdanubia among the Hungarian regions in respect of the employment statistics in the total of services and in business services (Table 1), and if we also look at the proportion of all services employment and business services employment within the total labour force of the individual regions (Table 2), the following statements can be made.

The proportion of South Transdanubia is decreasing within Hungary, but the decrease is more striking in the field of business services than in the tertiary sector as a whole.

The proportion of the services sector within employment as a whole grew in South Transdanubia at a pace exceeding the national average in all three years, but the growth of the business services sector lagged behind the increase of the sector nationally, a factor which is not a good sign of improvement in the economic structure of the region. The proportion of South Transdanubia both in

services as a whole and in advanced business services employment in Hungary has been continuously falling, but the decline is more significant in the case of business services.

Table 1

The proportions of the individual regions from all services employment and business services employment in Hungary in 1992–2001 (%)

Region	1992		1996		2001	
	Tertiary employment	Business services employment	Tertiary employment	Business services employment	Tertiary employment	Business services employment
South Transdanubia	8.6	7.2	8.2	6.6	7.9	6.1
West Transdanubia	8.7	5.9	8.7	6.9	8.8	7.0
Middle Transdanubia	7.9	7.3	8.1	7.7	8.4	8.6
South Great Plain	10.5	8.0	10.4	8.7	10.5	7.6
North Great Plain	11.8	5.8	11.9	8.0	11.5	6.6
North Hungary	9.7	8.6	10.2	8.3	9.4	5.9
Central Region	42.8	57.2	42.5	53.8	43.5	58.2

Source: Statistical yearbooks of the counties by the Central Statistical Office.

Table 2

The proportion of all services employment and business services employment within the total labour force of the individual regions in 1992–2001 (%)

Region	1992		1996		2001	
	Tertiary employment	Business services employment	Tertiary employment	Business services employment	Tertiary employment	Business services employment
South Transdanubia	48.6	4.0	54.3	4.3	56.3	5.6
West Transdanubia	44.8	3.0	47.3	3.7	48.0	4.9
Middle Transdanubia	42.2	3.8	44.9	4.2	45.9	6.1
South Great Plain	50.1	3.7	52.5	4.4	55.1	5.1
North Great Plain	49.3	2.3	56.2	3.8	57.1	4.2
North Hungary	46.2	4.0	53.3	4.3	55.9	4.5
Central Region	67.2	8.7	74.5	9.4	75.0	12.9
Hungary total	53.9	5.2	59.3	5.9	60.7	7.8

Source: Statistical yearbooks of the counties by the Central Statistical Office.

Services in the counties of South Transdanubia

The three counties that make up South Transdanubia are rather different both in their service sector structure and employment (*Table 3*) as well as in the rate of growth of the sector. In Tolna county the dynamic growth of the business services sector, well above the national average, is due to the nuclear power station of Paks – a company that alone generates 40% of the power production of Hungary. However, the proportion of business services in Tolna county is still low. In Baranya county development is less striking, but the starting level in 1992 was much higher. Somogy has the weakest tertiary sector among the South Transdanubian counties.

Table 3

Changes in the number of services and business services employees in South Transdanubia in 1992–2001 (2001 figures as a percentage of 1992 figures)

County	Business services employees	Services employees	Dynamics of the tertiary sector ¹	Dynamics of the business services sector ²
Tolna	162.2	92.7	120,7	175.0
Baranya	112.1	88.7	115,5	126.4
Somogy	91.6	92.8	113,2	98.7
Hungary total	129	103.8	118,8	124.3

¹ Change in tertiary employment as a percentage of the change in total employment.

² Change in business services employment as a percentage of the change in tertiary employment.

Source: The author, on the basis of the statistical yearbooks of the counties by the Central Statistical Office.

The proportions of individual service activities of total employment in the counties of South Transdanubia can be seen in *Table 4*. What is striking is the important role of education in the economy of Baranya county (owing to the county town, Pécs, being a university town), the higher share of hotels and restaurants employment in Somogy (the dominance of tourism) and the very low (overall) services employment of Tolna county. The proportion of hotel and restaurant employment is quite high in Baranya county also, reflecting the importance of tourism in the economy of the county and the importance of Baranya in the tourism of the region. Employment in health care services is at the same level in all three counties and very close to the national average. The weight of real estate and business services is strikingly low in Somogy county,

although the other two counties lag far behind the national average in this respect also.

Table 4

Tertiary activities as a proportion of total employment in the counties of South Transdanubia, 2001 (%)

Activities	Baranya county	Somogy county	Tolna county	Hungary
Trade, repair	10,4	10,2	8,6	10,8
Hotels and restaurants	3,4	3,9	1,7	2,9
Transport, post, telecommunication	8,0	8,7	6,4	8,3
Financial intermediation	1,6	1,5	1,5	1,9
Real estate and business activities	4,6	2,9	4,6	5,9
Public administration and defence	7,7	10,4	8,6	11,2
Education	13,7	9,8	8,9	9,2
Health	7,1	7,8	7,9	7,7
Other community, personal services	2,4	2,8	1,6	2,7
Services total	59,0	57,9	49,8	60,7

Source: Statistical yearbook of the counties by the Central Statistical Office.

The expected effects of accession to the European Union on the development of services

The strong spatial concentration of business services will probably last for years in Hungary, in fact, in the coming years it may even strengthen. Apart from the capital, accession will probably create a better situation for those regions which are already among the more successful ones: the borders (and the possibilities of closer economic co-operation) will be opened towards those counties – Austria, Slovenia and, to some extent, Slovakia – which have more potential as cooperative partners, deriving from their economic power. These countries neighbour the (already) more successful West Transdanubian and Central Transdanubian regions (not to mention the fact that these are the regions which are closer geographically, both in space and in time to the core areas of the European economy). On the other hand, between the other Hungarian regions and the neighbouring countries there will be Schengen borders for at least the next

few years, and these are precisely those Hungarian regions which have weaker economic structures. Economic co-operation between the somewhat weak economic potential of the “other side” (Croatia in the case of South Transdanubia) and the backward Hungarian regions is unlikely to result in a dynamic growth of the economy, including business services – and so the future does not seem to hold too much promise for South Transdanubia in this respect.



The castle is a valuable historic monument of the city. The city was developing together with the castle. Tourism still has an important role in the development of *Simontornya*. (Photo by György Mánfai)

Services in the development concepts of South Transdanubia

The priorities of the development of the South Transdanubia region – which were approved in 1995 and are still valid, are as follows: economic development and restructuring; agricultural and rural development, transport development, innovation development, the development of business services and regional marketing. Several strategic and operational programmes have been defined which aim at the improvement of the performance of the service sector in South Transdanubia. This demonstrates that policymakers are aware of the important role which services play in the economy and in the future of the region.

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TOURISM IN THE ECONOMY AT THE TURN OF THE MILLENNIUM

Gabriella Somogyi

The place of tourism in the economy of South Transdanubia

In the economic development of the region the exploitation of the possibilities of tourism and the selling of tourist services based upon internal resources plays an increasingly important role (*Lengyel, M. 1999*).

The part played by tourism in the economy is best, although not totally, reflected by the indices in accommodation services and catering – and then only to the extent permitted by statistical data collection. In the South Transdanubian region 2.47% of the gross domestic product was linked to accommodation services and catering in 2000, as opposed to a national average of 1.74%. Consequently, tourism is nearly one and a half times as important in the economy of the region as in the country as a whole. In the year 2000 10.32% of Hungary's GDP from accommodation services and catering was produced in the region – or, when broken down by county, comprising 6.22% in Somogy, 2.74% in Baranya and 1.36% in Tolna.

Nevertheless, tourism is accentuated differently in the value creation process of the counties making up the region. In Baranya, owing to the relatively highly developed processing industry and other services, 1.84% of the GDP produced in all economic sectors is connected to accommodation services and catering. In Somogy, this ratio is 4.83% – due to the significant volume of tourism around Lake Balaton, whereas in Tolna it is only 1.18% owing to the underdeveloped state of tourist services.

At the beginning of 2002 5,360 economic entities (all but 10 of which were registered private enterprises) were operating in the region in the field of ac-

accommodation services and catering, which corresponds to 7% of all enterprises, a figure which in its turn exceeds the national average by nearly 50%.

The proportion of companies indicating accommodation services and catering as their chief activity to the territorial distribution of all companies (1.26) is somewhat higher than in other regions of the country, with the exception of Western Hungary (1.58). Hence from the sectoral and territorial distribution of the companies we can gather that in the economy of South Transdanubia tourism is of greater importance than in other regions of the country with the exception of Western Hungary.

By examining the number of private enterprises and companies per 10,000 inhabitants, it can be seen that, with the exception of Somogy that incorporates the southern shore of Lake Balaton, fewer companies are operating in the accommodation services and catering sector than the national average. At the same time this activity is more popular among private entrepreneurs than in other regions of the country. Four inhabitants out of every 1,000 are private entrepreneurs in tourism.

In 2001 127 enterprises with some foreign interest and operating in the sector of accommodation services and catering had premises in the region. This means that 9.9% of all enterprises in Hungary with some foreign interest and operating in this same sector were connected to this region. The extremely small size of these entities is shown by the fact that their issued capital amounted to only 1.62% of the national total and their actual foreign-owned equity to a mere 1.55%.

The role that this sector plays in employment in the region only exceeds the national average by a small margin. The reason for this is that a significant proportion of the labour force actually employed (and these are, for the most part, employed only seasonally) come from other regions of the country. In 2001 9.34% of all employees in accommodation services and catering worked for entities with premises in the region. In relation to all employees this ratio amounts to 8.53%. Within the region the role played by the sector in the field of employment was most important in Somogy (3.9%). Baranya fell a little short of this ratio (3.37%) while the index only recorded 1.68% in Tolna.

In 1992 the figures for employees in this sector in the region (7.78%) were lower than for all employees (9.41%).

In respect of the country as a whole, the minor investments in the sector introduced between 1992 and 2001 and which amounted to a mere 1.07% of the investment in all sectors, showed significant territorial concentration. 57.77% of these were directed towards Central Hungary and only 5.45% towards South Transdanubia. The only region that had a lower rate of investment in the sector was Northern Hungary with 4.01%. Within South Transdanubia the total investment in the sector was insignificant in Tolna (280 million HUF over the

past decade, or only 0.21% of the national total), 2.82% in Somogy and 2.42% in Baranya. This was primarily targeted at the modernisation of accommodation and also at the establishment of new boarding houses and hotels.

The natural endowments and tourist attractions of the region

The diversified terrain and configuration of the landscape which makes up the region is bordered by what we may term living water – that is, by Lake Balaton and by the Danube and Dráva rivers. Owing to the adjacent drainage systems, to the level of pollution and to relatively heavy water-borne freight, the Danube, which constitutes the eastern border of the region, is less attractive for water tourism, whilst on the Dráva, following a border which can be regarded as one of the most pristine waterways of Europe, water tourism is on the increase in co-operation with environmental protection authorities. The almost 50,000-hectare Danube-Dráva National Park established along the two rivers is the largest protected area of national importance in the region. It offers programmes in many locations to those interested in eco-tourism. The Directorate of the DDNP, following both international and national tendencies, appeared on the tourism market with a specific range of tourist products for its target group – very much in the spirit of sustainable tourism. The Directorate of the National Park also deems it of extreme importance to organise and co-ordinate tourism in the several additional protected areas in the interior of the region. Lake Balaton, which is the northern border of Somogy, has been attracting bathers for a century and a half with its shallow waters and velvet sands. Over the gentle landscape of the county a number of new tourist attractions and activities (e.g. wine tourism, cycling and horse-riding) appeared at the turn of the millennium, all of which make it possible to extend the tourist season. Lake Balaton is also a popular area for boating and sailing and visitors are welcome in five spacious marinas offering wide-ranging services in Balatonboglár, Balatonlelle, Balatonszemes, Balatonföldvár and Siófok. Apart from the 'Hungarian Sea', several minor lakes, both artificial and natural, provide opportunities for water-side holiday and for indulging in water-sports, e.g. the lakes at Orfű, the reservoir at Deseda and the backwater at Fadd-Dombori, to mention only the better-known ones.

South Transdanubia, as other parts of the country, is rich in mineral and thermal waters. The mineral composition and healing effects of the waters and the development of the spas are very diverse and so they complement each other in attracting different market segments rather than compete with each

other. The most famous one is Harkány, which welcomes nearly one million guests annually. Its thermal water, known since 1823, supply a spa and an open bath which provide a wide range of services throughout the whole year. Other, also internationally known but less frequented, spas can be found in Tolna (at Dombóvár-Gunaras) and in Somogy (at Csokonyavisonta, Igal and Nagyatád). Guests are also welcome at thermal water pools with fewer services in Baranya (at Magyarhertelend, Sellye and Szigetvár), in Somogy (at Babócsa, Barcs, Buzsák-Csisztapuszta, Kaposvár, Nagybjom and Nagyberény) as well as in Tolna (at Dunaföldvár, Simontornya and Tamási). As a result of quality developments over recent years, two castle-style hotels can also be found in the region (at Hőgyész and Bikal) where thermal waters are used for establishing a range of modern medicinal and wellness services – and so the region can also claim progress in attracting guests with high incomes. The competitiveness of Harkány will certainly also be enhanced by current reconstruction works now nearing completion.



*Harkány, the city is an international centre of spa tourism.
(Photo by György Mánfai)*

Five wine regions out of the national total of 22 are situated in the region. From the middle of the '90s the Villány-Siklós Wine Route has been operating very successfully – based on local knowledge and initiative and also by adopting EU practice (*Zsibrik I.-né* 1998). By transferring their experience the

managers, together with certain of the vineyard owners of the Wine Road have also contributed to the establishment and successful maintenance of other wine roads in the region (the Southern Balaton Wine Route, the Mohács-Bóly Regional White Wine Route, the Szekszárd Wine Route and the Tolna Wine Route) to a great extent, hence providing a new and unique programme for tourists searching for value. In the region as a whole there are currently 63 settlements striving to improve wine tourism in general and the welcome given to tourists interested in wine culture within an organised framework.

In the course of the '90s, just as in other parts of the country, numerous cultural and gastronomic events and festivals were introduced in the South Transdanubian region which have been repeated annually on the regional tourist agenda ever since, e.g. the internationally famous culinary festival 'In the Footsteps of the Royal Chefs' at Nagyszakácsi, the 'International Wine-Song Festival' and the 'Summer Theatre Festival' in Pécs, the 'Episcopal Open Cellars' – an event which originally started in Palkonya, but which has since grown into a countrywide movement, the 'Alisca Wine Days' at Szekszárd and the 'Carnival Days' at Kaposvár.

Beyond the events, the architectural values, museums and exhibitions of the region also attract tourists. The ancient Christian burial chambers in Pécs now acclaimed as part of The World Heritage make it possible to attract a further circle of international guests into the largest provincial museum centre of the country. The architectural monuments from the Turkish era that are to be found in many towns as well as the memorial sites in Szigetvár and Mohács also contribute to the unique tourist image of the region.

Within the field of business tourism, the conference tourism of those towns of the region that are home to higher education institutions is worth mentioning. Among these the role of Pécs is outstanding. The work of the higher education and research institutes, of the regional institutions and of the social organisations of the city attract nearly 100 well-attended conferences to the city annually, a factor which increasingly highlights the necessity of establishing a modern, well-targeted conference centre.

Characteristics of the supply and demand sides of tourism

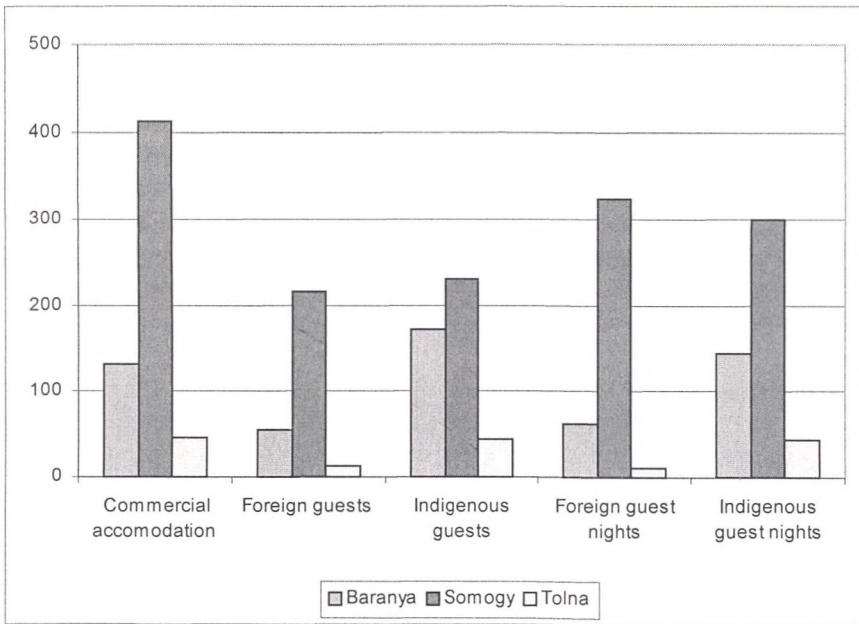
Based on the commercially and privately operated accommodation establishments concentrated on the southern shore of Lake Balaton (the second most significant tourist attraction area of the country) and their guest numbers, South Transdanubia has also acquired a leading role in respect of several tourist

indices across the regions. The number of commercially provided beds per 1,000 inhabitants (63) was twice the national average in 2001. In the case of private accommodation, the specific number of beds was five times as high as the national average and the number of guests 3.6 times as high.

Regarding accommodation supply and actual guest turnover, significant territorial differences can be observed within the region (see *Figure 1*). Concerning the number of commercial beds per 1,000 inhabitants, there was a 10.5-fold difference between Somogy and Tolna as a result of state-promoted development giving preference to the Balaton region in the years following the change of regime. This difference has hardly changed under market conditions either, merely dropping to 10-fold by 2001. There never has been – and there still is not – any other region in the country where similar territorial differences occur in the supply of tourist accommodation.

Figure 1

Some characteristics of tourism in the South Transdanubian region per 1,000 inhabitants – as a percentage of the national average, 2001 (%)



Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2001.

With reference to hotel accommodation, the differences within the region were even greater in 2001 than in 1992. This was due in the first place to the fact that in the course of the '90s resorts around Lake Balaton previously owned by companies or institutions were renovated and then opened to the public and new, modern hotels were opened by private investment. At the same time in areas at a somewhat greater distance from Lake Balaton only smaller-scale boarding houses were established, mostly based on family savings.

In terms of the absolute number of commercially provided beds moderate changes occurred in the 10-year period examined. The capacity of such accommodation increased by one third in Baranya but decreased by 14% in Somogy and remained virtually unchanged in Tolna. Hotel accommodation showed conflicting changes on several occasions with a 14% growth in Baranya, a 3.4-fold jump in Somogy and a 1.6-fold increase in Tolna.

The number of all tourists seeking commercial accommodation dropped by nearly 5% in the 10 years under examination in Tolna, but rose by 47% (which is more than 1.5 times the national average) in Baranya and by 87% (three times more than the national index) in Somogy.

Examining the change from the point of view of the home area, foreign interest in Tolna fell by 30%, but in Somogy nearly 40% more foreign tourists were registered in 2001 than 10 years previously. Baranya was also visited by more than 10% fewer foreign tourists at the beginning of the 21st century than a decade earlier.

Regarding the whole of the country, 60% more domestic tourists sought commercial accommodation during their business or leisure trips in 2001 than in 1992. The growth of domestic turnover, however, was significantly lower – a mere 8% in Tolna. In the same period the number of domestic tourists grew by 180% in Somogy (due to the huge popularity of Lake Balaton) and by 90% in Baranya, a county blessed with many and various tourist attractions.

From the fact that the growth in the number of guest nights falls significantly short of the change in the number of guests (or, as in the case of Tolna, the scale of the decrease exceeds it) we can conclude that the consumer habits of the tourist have changed and that the competitiveness of the region has declined. The total number of guest nights between 1992 and 2001 increased by 3.5% in Baranya (falling significantly short of the 14.3% national average), grew by 17.5% in Somogy and dropped by 17.2% in Tolna. The number of foreign guest nights has, in contrast to the national tendency which show a 4.8% increase, fallen in all counties – by 22% in Baranya, 9% in Somogy and by 37% in Tolna. The region's position in the competition for indigenous tourists and for their money ear-marked for recreation was domestic somewhat more favourable. The number of domestic tourists nights increased by 29.5% in Baranya –

approximating to the national average – doubled in Somogy and declined by 6% in Tolna.

With regard to the number of guest nights per 1,000 inhabitants, in 2001 only the West Transdanubian region could boast of more favourable ratios concerning the total number of tourist nights and domestic ones. With reference to foreign guest turnover, the Central Hungarian region (also including Budapest) obviously also precedes South Transdanubia.



Lake Balaton is an important tourist destination both for European and Hungarian visitors. An ideal tourist spot for families with children. (Photo by György Mánfai)

Summary

Over the 10-year period which we have examined the tourism performance of the region has become healthier, i.e. the interest and the proportion of domestic tourists has increased. This is, not least, due to the expansion of programmes offered by the region. An increasing number of cultural events, wine and gastronomic festivals, equestrian tourism and tourism aiming at revealing the val-

ues of the protected natural sites have appeared on the supply side. Tourists in favour of more active leisure pursuits can cycle around the whole of Lake Balaton, the creation of safe cycle-ways is also underway on the wine route and those involved in equestrian activities and services have also started to form a network.

In the long term a lack of modernity and facilities (in some cases relative, in other cases absolute) in the region's thermal and medicinal baths can cause a serious competition disadvantage in this field of spa tourism. Recreation and wellness services aiming at the preservation of health and the prevention of disease are non-existent. These are essential preconditions for spas wishing to attract a wider range of generations, including a new, younger circle of guests. In this respect raising the quality of application for available state subsidies is vital.

One further factor in strengthening tourism is positive urban, micro-regional and regional place- and product-marketing activity and one crucial point of development would be enhanced regional co-ordination for the sake of more effective market action to replace fragmented local initiatives.

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THE ROLE OF THE STATE SUBSIDIES IN THE REGIONAL DEVELOPMENT

Cecilia Mezei

Introduction

To emphasise the need for an analysis of the role of the central subsidisation system within regional development is justified by several considerations. Insufficient local development resources boost the value of central development resources. It is decisive from the point of view of the development of the whole country as well as of the individual regions how much funding is appropriated to development from the central budget each year and how much of this is allocated, taking into consideration the various aspects of regional development and the decentralisation of these resources. Excessively centralised allocation of resources is also characteristic of Hungarian development practice. Some progress has been made in this field since the systemic change, but the scale of resource decentralisation is still not satisfactory. The development backlog lays an immense burden on the central budget since the "own resources" of the local government are insufficient and the scale of entrepreneurial and private development varies greatly in the individual regions. The lack of private and local authority development investment in the more backward areas justifies the distinctive role of central subsidies within the regional and economic development of the country.

The Hungarian central subsidisation system that is examined here consists of three main component groups. One such group is made up of direct regional development subsidies. Apart from these there are also settlement development subsidies and sectoral subsidies.

Types of central development subsidies

Central development subsidies are characterised by augmented development resources, increasing decentralisation and also by a change in the forms of subsidy from 1990 onwards.

Between 1991 and 1994 individual government programmes were elaborated for those counties and areas assessed as being in the most critical condition. The scale and means of budget subsidies to the different counties (regions) were laid down in separate government decrees. In South Transdanubia one single micro-region "in crisis" was granted a share of these development resources.

The Regional Development Fund was established in 1992 and its budget has risen annually. Only beneficiary settlements were entitled to apply for subsidies and, in addition, further benefits might also be claimed according to the regulations. A separate fund was necessary due to the existence of huge regional differences and since this problem could no longer be handled solely with the help of individual government programmes. From the enactment of the Regional Development and Physical Planning Act in 1996 this fund was replaced by two forms of subsidy providing direct financial resources for regional development. These are regional equalisation subsidies and targeted regional development subsidies.

Among the direct regional development subsidies the targeted regional development subsidies are decentralised development resources under the authority of the county regional development councils which were established for economic development, job-creation and infrastructural development purposes (see the chapter written by Pálné Kovács, Ilona). The budget of the regional equalisation subsidies is also decided by the county development councils as well as that of the targeted decentralised subsidies established in 1998. All three direct regional development subsidies operate with those settlements which are either underdeveloped from a social-economic and infrastructural point of view or which suffer from an unemployment rate well in excess of the national average – as well as with the beneficiary areas from the point of view of regional development. Either being on the list of beneficiary areas is a precondition for applying or the scale of the subsidy depends upon the classification. The regional equalisation subsidies are firstly to aid local government infrastructural development, whereas targeted decentralised subsidies complement local government investment-development expenditure and include "vis major" assistance. These latter two can only be applied for by local authorities.

As the final element of decentralised direct regional development resources we must also mention the backward region and settlement development targeted provision established in 2003 within the authority of the regional devel-

opment councils. This operates with invitations to apply very similar to the purposes and conditions of the regional development provision. However, it also appears as a new factor in handling the problem of dying settlements – which are increasingly emerging in the South Transdanubian region – with special attention.

As can be seen, due to the close correlation of Hungarian regional development resource allocation and local government financing, decentralised regional development resources play an important role in the financing of local governments (*Somlyódyné Pfeil, E. 2003*).

Most of the development subsidies, nevertheless, are allocated centrally. Here we can mention those subsidies handled by different ministries which for the most part serve sectoral development purposes e.g. tourism, the road network, piped water supplies, the sewage network, agricultural, rural, environmental protection, human resources, economic, entrepreneurship development etc. Apart from local governments, in general, companies, other organisations – and, in many cases also, individuals can apply for these subsidies.

Targeted or specifically addressed subsidies are designed for promoting explicitly local government investment. Whilst addressed subsidies belong to group of subsidies regulated individually and on a case-by-case basis and can be claimed for large-scale investments of regional or national importance, targeted subsidies are normative regarding their decision-making mechanism since the fundamental principles are laid down in the Finance Act. Local government who meet the criteria are entitled to the subsidy automatically. This, however, is countered by the fact that, over and above these fundamental principles, there is a specific and limited budget – which makes it impossible to meet all of the valid claims.

Since 1999 the trustees of the resources are obliged to appropriate a certain percentage of the centrally allocated resources for those counties “most greatly disadvantaged” – determined by GDP per capita. (Until 1998 such a quota was only valid for the county of Borsod-Abaúj-Zemplén). In 2000, however, Somogy became the first South Transdanubian county to belong to these special counties. In 2003 at least 10% of the central resources as laid down in the Act must be allocated for Somogy.

From 1996 various EU funds appeared among the subsidies received by certain areas and settlements (e.g. PHARE, ISPA, SAPARD).

This evidences the fact that the most serious problem of the Hungarian subsidisation system is its lack of transparency. There are often overlaps between the (frequently changing) targeted provisions although they serve the same purpose and the ministries handling the provisions tend to look upon these subsidies as their private, internal affairs. Efforts to align the provisions contained in different sections were in vain and several evaluations drew the at-

tion of the decision-makers to the problem (e.g. the European Union's County report). It is generally true that the individual forms of subsidy do not look for the advantages often to be found in synergy, and a further problem is the excessive level of regulation. In addition, the people concerned are often required to know detailed changes in the law – all of which leads to a lack of consistency or stability. The fundamental principle of resource concentration is also violated by the fact that development resources are excessively fragmented. Controlling the system is difficult and measuring its efficiency is almost impossible.

When we evaluate the Hungarian subsidisation system we should, at the same time, not ignore the fact that this is a learning system that naturally bears the marks of continuous change. Furthermore, this system had to be developed and made ready to operate within a developing political, economic, social and legal environment – which has only been a partial success.

The ultimate objective, of course, should be to establish a distilled subsidisation system that harmonises with those of the European Union where fundamental principles such as concentration, efficiency and monitoring are actually realised. Increasing decentralisation and the ensuring of the principle of subsidiarity are also included in the requirements. So far there has been no opportunity to carry out programming since the conditions, which change from year to year, have precluded any possibility of long-term planning. It is essential to introduce these much-needed changes in the near future and, in consequence, the forms of subsidy will not generate local initiatives, but vice versa.

Central development subsidies in the South Transdanubian region

Direct regional development subsidies

If we examine the central development resources allocated to the South Transdanubian region, we must examine the periods before and after 1996 separately owing to the essential changes in the Hungarian regional development situation.

The South Transdanubian region was an action field for individual government programmes after the systemic change. However, no county development plans were elaborated, although special attention was paid to the Pécs-Komló "crisis area" as a result of the cessation of the old mining activity. Of the seven counties given such special attention between 1991 and 1995 Baranya was the

only one where a government resolution was accepted alleviating the problems of a smaller area rather than of the whole county. The region's share of regional development subsidies was insignificant, whilst within the period their total grew year by year. However, the real value of regional development subsidies continuously decreased and its proportion of GDP did not reach 0.2% (it was no more than 0.16% even in 1994 with high regional development subsidies that amounted to 7.2 billion HUF).

The year 1996 was a turning point since, after the Regional Development and Physical Planning Act came into effect, the financial instrument system for regional development became complex and the total of regional development subsidies increased from year to year. The percentage of the projected central budget and European Union subsidies for regional development to the GDP had already reached 0.42% in 2001, a figure which can definitely be considered fair (Illés, I. 2002).

It is worth examining the three most important direct financial instruments of regional development more closely, that is to say the regional development targeted provision, the regional equalisation subsidy and the targeted decentralised subsidy, which has operated only since 1998 (see Table 1). The cumulative total of these decentralised resources exceeded 178 billion HUF between 1996 and 2003. In the region subsidies equalling more than 23 billion HUF generated some types of development process within the period under examination. 13.2% of all subsidies were allocated to the region and hence the subsidies per capita amounted to nearly 24,000 HUF (whilst the national average was below 17,500 HUF). In those regions with lower capacities (the Northern Great Plain, Northern Hungary, the Southern Great Plain and South Transdanubia) the average figure varied between 21,000 and 28,000 HUF (in the Southern Great Plain region the subsidies per head were lower than in the South Transdanubian region, although with regard to the respective development levels the reverse would appear to have been more reasonable).

The PHARE programme of the European Union further diversified the picture since, if we also add the PHARE resources between 1996 to 2002 to the direct financial resources of regional development, the subsidies per capita leap to 27,000 HUF in Southern Transdanubia whilst the national average changes to 20,000 HUF. Through the PHARE programme additional resources of 3.7 billion HUF were allocated to the region until 2002 from the 27.8 billion HUF national budget. After the success of the 1996 and 1997 PHARE programmes South Transdanubia was no longer classified as a beneficiary of the PHARE 2000 programme. (Based upon the development indices only the three Eastern Hungarian regions were considered as target regions of the programme). South Transdanubia received only a share of the PHARE Twinning Programme resources from the government.

Restricting the scope of beneficiaries, nevertheless, is not something applied only to the PHARE programmes; it also features in the appropriation of all direct regional development subsidies. We need to deal with the beneficiary areas (statistical micro-regions) and with “disadvantaged settlements” separately since these are subject to special regulations.

Table 1

Direct financial instruments of regional development per capita and regional GDP between 1996 and 2003*

Regions	Regional development subsidy per capita		GDP per capita	
	'000 HUF	Percentage of national average	'000 HUF	Percentage of national average
South Transdanubia	23.59	135	956	74
Central Transdanubia	15.01	86	1,303	101
West Transdanubia	13.75	79	1,462	114
Central Hungary	6.58	38	1,998	155
Northern Hungary	27.82	159	823	64
Northern Great Plain	26.09	149	809	63
Southern Great Plain	20.87	120	913	71
Total	17.46	100	1,288	100

* The subsidies taken into account are the targeted regional development subsidies, the regional equalisation subsidies and the targeted decentralised subsidies (only from 1998). In the case of the 2003 data we calculated on the basis of the budget projections. In the case of the population we have taken the average of the 1996 and 2002 figures into consideration and for the GDP the 2000 data.

Source: Regional Operative Programme 2003, Government Decree 25/2003 (04-03); Joint notice of the Ministry of Internal Affairs, the Prime Minister's Office and the Ministry of Finance 2003; Regional Statistical Yearbook 1995, 2001.

Beneficiary micro-regions and settlements in South Transdanubia

The specification of beneficiary regions from the regional development point of view has changed on several occasions since 1996. The basis of the specification is the micro-regional classification applied by the Central Statistical Office since 1994 that conforms to the fourth level of the NUTS system of the European Union. Owing to the modification of the statistical micro-region specification (the number of statistical micro-regions jumped first from 138 to 140 and then to 150), we only trace the changes from 1998. Compared to the 1998 specification

the 2001 specification produced a further three micro-regions – two in Tolna and one in Somogy – to beneficiary status, whilst one micro-region in Baranya was refused beneficiary status from 2003 (see Figure 1). Between 1998 and 2000 88 statistical micro-regions out of the 150 in the country counted as beneficiaries from the regional development point of view, between 2001 and 2002 the number of micro-regions selected jumped to 100, only dropping to 94 in 2003. In 1998 15 micro-regions, from 2003 17 of the 22 of the region count as beneficiaries (most of them for dual reasons in parallel) which exceeds the regional average by 20%.

In 1998 33% of the population of the country (41% excluding Budapest) lived in beneficiary micro-regions. This ratio changed to 36% (44% excluding Budapest) in 2003, although in the European Union the aim is to reduce the proportion of people living in beneficiary areas in compliance with the principle of resource concentration. In 1998 42% of the inhabitants of the region lived in beneficiary micro-regions, and in 2003 this rose to 52% – 47% in Baranya county, 49% in Somogy and 64% in Tolna. (Regional Statistical Yearbook, 1998, 2001). In 1998 12% of the total beneficiary population lived in South Transdanubia although in 2003 this rose to 14%.

In 1998 58% of the national territory lay within the beneficiary areas, although by 2003 this had become 63%. At the present time 69% of the South Transdanubian region – as opposed to the 59% calculated in 1998 – is considered as beneficiary from the spatial development point of view. The highest proportion is found in Baranya county and the lowest in Somogy.

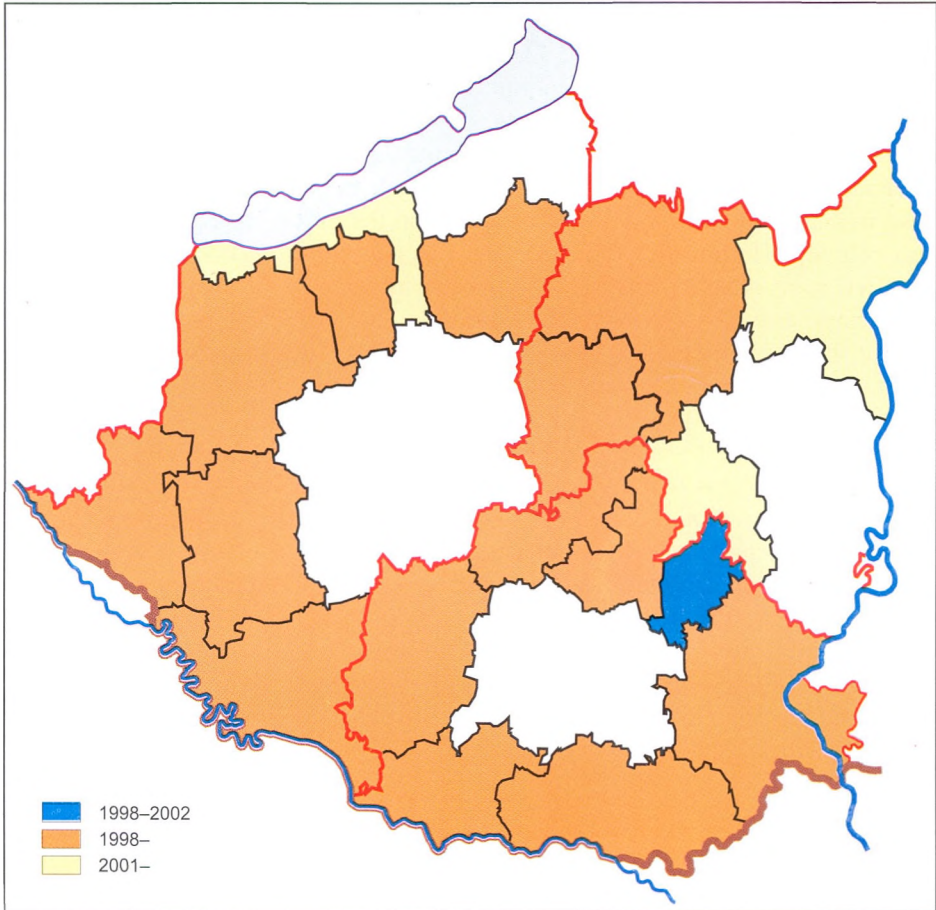
In addition to the criteria for classification as “beneficiary” the major indices and definitions used in the classification process itself change periodically. Since 2001, which saw the cancellation of the category of “region seriously affected by long-term unemployment” only three types of beneficiary region have been defined:

- areas lagging behind from a social (socio- and/or) economic point of view;
- regions requiring industrial restructuring and;
- regions of rural development.

The complex indicator used in regional categorisation includes demographic, social, employment, economic, infrastructural and other specific indices. The range of applied indicators has changed periodically, and the conditions defining individual categories of region have been modified likewise.

Figure 1

Beneficiary statistical micro-regions from the regional development point of view in the South Transdanubian region from 1998



Source: Government Decrees 19/1998 (04-02) and 91/2001 (15-06) on the register of beneficiary areas of regional development.

A specific government decree defines the circle of beneficiary settlements from the spatial development point of view. Firstly, in 1996 1,473 settlements were classified as lagging behind – either from a socio-economic and infra-structural standpoint or being seriously affected by unemployment (defined as at least 50% above the national average). At that point 410 South Transdanubian

settlements were included in this list and of the 47 listed towns or cities 3 were in the region. Following amendments introduced in 1997 and 1999 a new specification was issued in 2003 relating to settlements lagging behind from socio-economic and infrastructural points of view or seriously affected by unemployment significantly above the national average (newly defined as at least 75% above the national average). The new specification classified 1,470 settlements occupying 33% of the surface area of the country as beneficiary areas. 16% of the total population live in the selected areas. The South Transdanubian region is represented by 417 settlements on the current list, three of which have town status. 265 settlements of these 417 count as underdeveloped for two reasons. The modifications resulted in the exclusion of nine settlements in Tolna. At the same time the number of settlements on the list increased by four in Baranya and by twelve in Somogy (see *Figure 2*). Based upon 2002 population data 22% of the inhabitants of South Transdanubia live in beneficiary areas according to the new specification – which exceeds the average of the regions. Regarding the less developed regions North Hungary and the Northern Great Plain have higher proportions (45% and 35% respectively) whilst the proportion on the Southern Great Plain (18%) equals the average of the regions. The county average amounts to 20%. Both Baranya and Tolna fall short of this by 1%, whilst Somogy exceeds it by 8%.

The changes demonstrated in the beneficiary settlements and areas from a regional development point of view are natural consequences of the development of regional GDP and of demographic processes as well as of the changing specification of the beneficiaries.

Indirect financial instruments of regional development

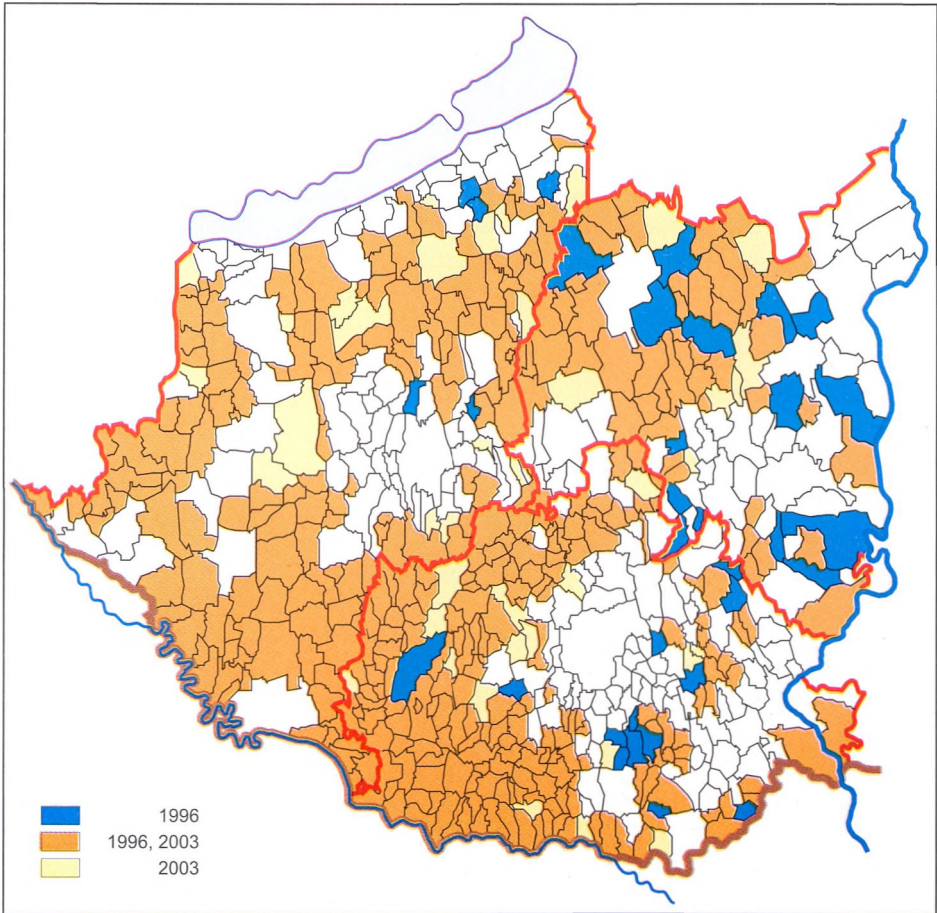
Apart from the above-mentioned decentralised regional development resources, central subsidies serving regional development purposes also include the resources of the diverse sectoral provisions, funds and targeted subsidies.

South Transdanubia's share of these resources is difficult to calculate since data for the individual provisions broken down into regions are only available for different time frames. The period from 1996 to 1998 appears to be easy to compare. In this period subsidies totalling 31.7 billion HUF (calculated at 1998 prices) were allocated to the region, apart from the direct regional development resources – which falls short of the national average, not including the Central Hungary region, which approximates to 37 billion HUF. The Central Hungary region obtained nearly 26% of all resources (298 billion HUF). Only the much more developed West Transdanubian region was granted fewer subsidies than South Transdanubia. The region's share of economic development funds and of

those for road maintenance and development is very low. The latter, in addition, only covers maintenance subsidies following the postponement of motorway construction (*Report on the development... 2001*).

Figure 2

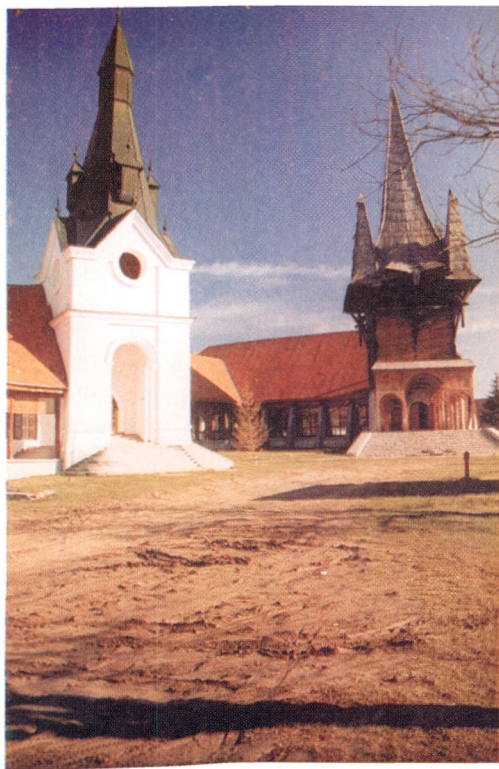
Settlements either underdeveloped from a socio-economic and infrastructural point of view or suffering from an unemployment rate significantly exceeding the national average in the South Transdanubian region in 1996 and 2003



Source: Government decrees 219/1996 (24-12) and 7/2003 (14-01) on the register of settlements either underdeveloped from a socio-economic and infrastructural points of view or suffering from an unemployment rate significantly exceeding the national average.

Whilst the region's share of direct regional development subsidies can be regarded as fair and complying with the development level of the region, the situation of South Transdanubia has become less favourable in respect of the regional allocation of other central resources. In consequence, the overall picture reveals a lack of central resources.

All this indicates that, in the course of spending the development resources of the provisions covered in various sections, the ministries do not follow the allocation principles that are desirable from the regional development point of view in every case. However, one single large-scale investment is capable of generating serious regional effects in itself, not to mention the fact that the total of direct regional development subsidies is still only a fraction of the central budget investment and development expenditure. Consequently, its regional equalisation effect cannot be significant either if it is not supported by other resources.



Kakasd is populated by ethnic minorities preserves and develops the values of folk even in a new constructions. (Photo by György Mánfai)

Summary

By way of summary, in the period under examination there have not appeared any significant changes that could be attributed to development subsidies, economic development interventions or to economic development processes in the region. It will only be possible to measure and evaluate the development effect of the subsidies in the longer term. However, what can already be seen are several noticeable, large-scale investments and the initiation and implementation of a number of job-creation, infrastructure- and institution-developing, enterprise-furthering and economy-boosting projects in the region. Nevertheless, this in itself is only sufficient to prevent the region's development indices from showing a deterioration.

In the future the (necessary) transformation of the Hungarian state subsidisation system, the strengthening of resource concentration and an increase in the decentralised resources, as well as the development resources flowing into the region, may lift the South Transdanubian region out of its present situation and generate more spectacular improvements in the living standards of the local population.

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REGIONAL INNOVATION DEVELOPMENT

Zoltán Gál

Introduction

A general consensus exists on innovation-oriented regional development in the literature, in which the utilisation of the regional knowledge base, innovation potential and co-operation between businesses and research institutions continues to play an increasing role in regard to business success and the competitive economic performance of a given region. Innovation is considered as an interactive and cumulative *system-like* process depending on traditions, with definite *spatial forms*. In the past few years we have seen new approaches in the understanding of the role of innovation network in successful regional development and a great deal of research has been done on regional networks and linkages with the reference to 'network paradigm'. Models have shifted from linear and firm-based microeconomic concepts towards the systemic approaches. The economic attraction of the regions and the spread of knowledge also depend, however, on the spatially balanced network co-operation of the different research bases, small and medium size enterprises and organisations involved in innovation development. Innovation networks can be observed at various spatial levels, supporting the arguments of Camangi (1991), Cooke and Morgan (1993) global, national and regional systems have been discussed in recent literature (Braczyk, H. J. et al. 1998).

The researches on the innovation theory and methodology carried out in the 1990s aimed at the exploration of the tight correlation between regional development and technological changes, and the relations between the regional innovation potential and the innovation networks (Cooke, P. 1996, Tödting, F. 1994). These researches primarily focused on the mutual interdependencies and the junctions of the feedback can be seen within the companies (e.g. among the processes of distribution, marketing, R & D and production), among the companies (relation to the customers and the suppliers) and among the different

organisations. A significant part of these dependencies often go beyond the traditional market connections and is manifested in the form of "networks" which create more stable connections organised on the ground of trust, allowing the creation of common networks mediating and sharing innovation, information and knowledge (Cooke, P.-Morgan, K. 1993, Tödtling, F. 1999). The connection to these networks is of decisive importance primarily for the small and medium size enterprises and the local actors, as the connection provides a local access to the global mass of information and knowledge. These characteristics necessitate the survey of the location factors and the regional dimensions of innovation networks.

For the creation of the competitiveness of regions it is necessary to spread knowledge and innovation capacity in a broad circle. For the backward regions, the utilisation of the new economic possibilities offered by the information society can be a breakout point, by increasing their innovation capacities. From this aspect, the development of higher education and research is indispensable, with special regard to their relation to industry and companies. The economic attraction of the regions and the spread of knowledge also depend, however, on the spatially balanced network co-operation of the different research bases, small and medium size enterprises and organisations involved in innovation development.

The situation of innovation in South Transdanubia

The region of South Transdanubia can only assert a moderate attraction for the external, mostly foreign inward capital, and this is one of the main reasons why South Transdanubia is lagging behind in the field of economic performance. The most serious structural growth problem is the weakness of manufacturing industry, which can be seen in the regional GDP and the industrial export capacity. The key to the structural transformation, sectoral rearrangement, the establishment of a competitive structure lies in the strengthening of the innovation potential of South Transdanubia, the technical and technological renewal, the creation of the service background of product and process innovation.

In the economic development of South Transdanubia after World War II, following the typical peripheral model of de-industrialisation, the structural transformation of the region took place from external resources, by extra-regional (central and business) decisions. The internal economic cohesion of South Transdanubia was weak (Horváth, Gy. 1998a). The endowments of innovation are rather unfavourable in all three counties. South Transdanubia, similarly to the Great Hungarian Plain and North Hungary, showed semi-

peripheral conditions in the early 1990s, whichever element of the innovation potential we see. By the figures of R&D, the lagging behind of South Transdanubia is obvious. Until the mid-1990s, South Transdanubia had the weakest R&D capacities among the Hungarian regions (in 1995, only 3.5% of the Hungarian R&D employees worked in South Transdanubia and only 1.5% of the inputs were spent here; also, the full-spectrum technical higher education is missing) (Table 1).

Table 1

Basic data of R&D institutions in the South Transdanubian region, 2000

Area	Number	Total staff number, person ^{a)}	Of which scientists and engineers	Expenditure ^{b)}	
				million Ft	Percentage of GDP
Country	1,887	42,088	24,609	77,454	0.76
Within it					
Baranya county	132	2 080	1,370	2,181	0.68
Somogy county	19	258	121	291	0.12
Tolna county	13	65	57	24	0.01
South Transdanubia total	164	2 403	1,548	2,496	0.32

^{a)} Applied to the full time employees.

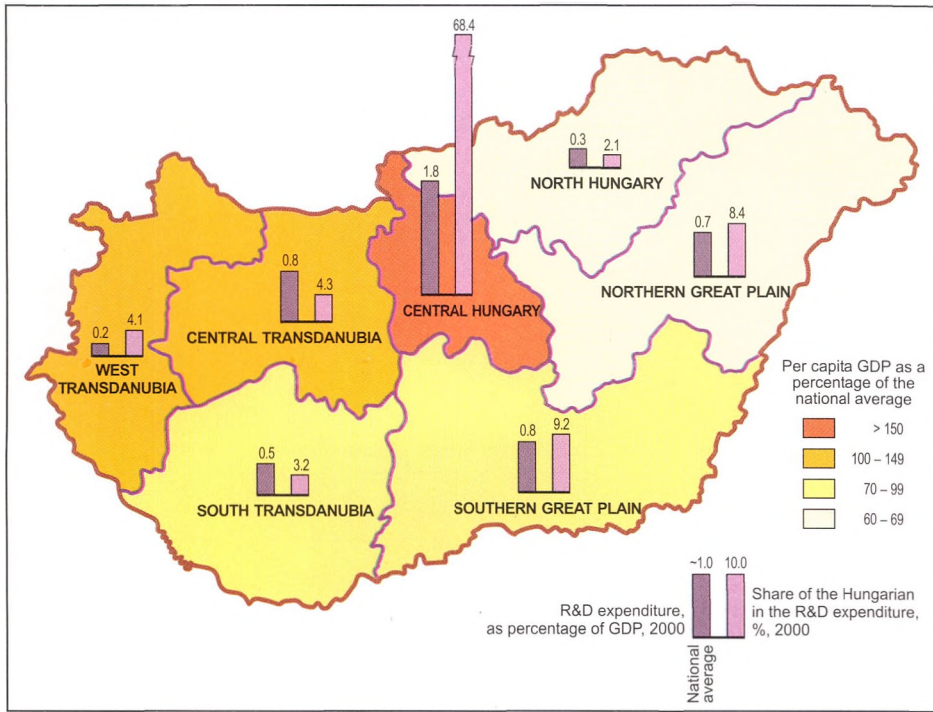
^{b)} Including expenditure on related activities (production, services).

Sources: Research and Development 2000.

Over the last decade, some improvement has taken place in a few areas. As a result of the strengthening of university and business researches, by 1999 South Transdanubia increased its share from the number of employees to 5.7% and to 3.2% as regards expenditure, however, it is still the one before last in the latter respect) and by 2000 South Transdanubia increased its R&D share from the GDP and reached the 5th regional rank in a direct consequence of the allocated national R&D funds. Despite this achievement the share of business sector in the R&D expenditure still the least in this region and the resource absorption capacity of the regional universities still much lower than its East-Hungarian counterparts. (Gál, Z. 2002, Hrubí, L. 1999, Horváth, Gy. 1998a). (Figure 1).

Figure 1

Regional specialities of innovation in Hungary



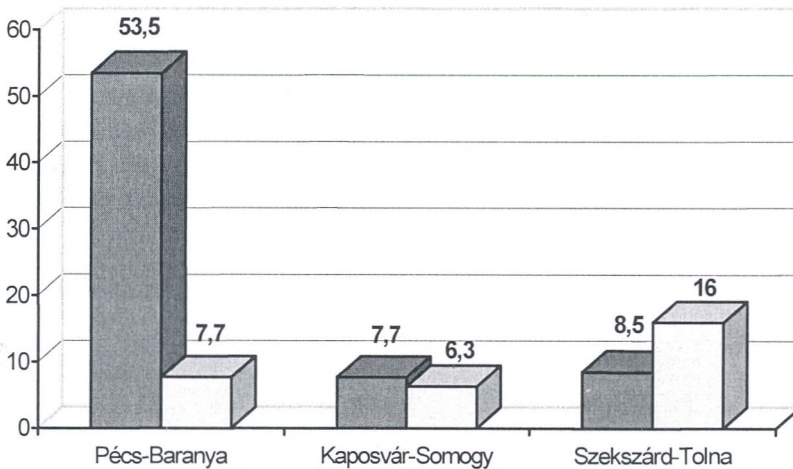
Source: Hungarian Statistical Office, 2001.

In 2000 more than 400 innovation-oriented companies (firms with 'presumably' innovative profile) were selected according to the database of the Statistical Office and the Chamber of Commerce (*Inno Regió*, 2000). The database included enterprises that have R&D activities as listed in the register of economic activities, and those that applied for MFA (Hungarian Development Fund) grants. These data were complemented with the innovative enterprises identified by the chambers of industry and commerce in the three counties. The findings of the database has shown an enormous concentration of the innovation oriented SMEs in the city of Pécs and county Baranya (54%; 61%). This database also highlight the progress in innovation activities, as the technical level of the produced goods has considerably improved, the supplier connection has strengthened and more and more SMEs have done own R&D activities in the past years. The development of innovation is now among the activities of not only manu-

facturing firms but also an increasing number of other firms (e.g. services) involved in innovation development. The number of institutions (and organisational units) supporting and organising innovation in the region has increased and so has that of the industrial parks and incubators, and the first innovation centres have been founded. The activity of the bridging organisations has strengthened, although their efficiency varies, their co-operation is occasional and their division of labour is not always adequately co-ordinated. Certain special technology transfer, financing and innovation services (consulting) institutions are still absent in the region (Figure 2).

Figure 2

The share of counties and their seats of the total number of innovation-oriented companies & organisations, 2000 (%)



Source: Inno Regio Database, 2000.

Summarising the situation of innovation in South Transdanubia, the *strengths* and *weaknesses* of the regional innovation potential can be enumerated. Following a series of discussions, consultation and some preliminary surveys over the regional innovation development in the South Transdanubian region, a perspective was generated on the issue of potential *innovation-related strengths* of the region. Among these is the fact that the region has a centre, the city of Pécs with strong cultural, higher education, economic and service, and also innovative traditions, which are important factors in the allocation of critical mass of

the institutional and financial resources required by successful innovation programmes. In the coherent development programme of the region the development of innovation is a selected priority, in harmony with the strategic branches of the economic development. The Regional Development Agency has committed itself to the co-ordination of regional innovation development and the elaboration of strategies (RDA is the consortium leader of the EU supported RIS programme, EU supported RIS programme, in which the Transdanubian Research Institute is a consortium partner).

The region has a good higher education background, ambitious and innovative research staff (2 universities, 5 public research institutes), which is a huge potential for R&D especially in certain segments (biotechnology, environmental research, laser physics). Some commitment has already occurred in the region in order to develop closer ties between firms and research institutes. The region is able to learn, it has a relatively well-trained labour force and a population whose language skills are better than the national average.

On the business side we can see that multinational companies located in the region are typically innovative (Elcoteq, NABI). An expanding segment of SMEs is innovation-oriented and their supply links have appeared. On the supporting institutional side the Pécs–Baranya Chamber of Commerce offers a significant innovation support for entrepreneurs, through their technical assistance, databank, innovation broker trainings and also other services which significantly contribute to the spreading of the conscience of innovation within the region. Recently three innovation and transfer centres have started their operation in the region from EU Phare resources. The innovation centres, connected to the already existing industrial parks, organise the implementation of R&D, meeting the demands of the economy, and carry out innovation services. In Pécs, a Regional Co-operation Research Centre was founded on the university research base in 2000, which, building on the close relation with the Innovation and Technology Development Park, has created a potential research base in the field of laser technology, immune diagnostics and micro-analytics, but environmental protection, the use of alternative energies and electronic developments also receive selected support. The centre considerably strengthens the technical and natural science research and its business relations are underrepresented in the region, but first of all it can evoke the conscious interest of the SMEs in the new technologies.

Regarding the specific economic, institutional and political structures in the region, there are certain factors that have *negative effects* on the developing innovation process. Among these the lack of a comprehensive innovation strategy and the institutional fragmentation is the most decisive, partly because too many organisations deal with innovation, but innovation has no co-ordinating basic institution at regional level (fragmented flow of resources of information).

There is no consensus among the institutions with innovation profile of the region and the co-operation among the existing actors are not worked out well, they are individual actions which are often parallel and not effective, the flow of information is occasional.

The links between the industry and the university sector are weak and occasional. The universities do not have innovation strategies and the local institutional-organisational representation of innovation support at the universities is inadequate. The higher education profile of the region has a relatively weak representation of technical sciences, especially in the fields necessary for the background of technology change (e.g. micro-electronics, informatics, automation) therefore universities need to improve their potential to effectively assist the change of technology and the region has to increase its share from the R&D employees that is still very low (*Figure 3*).

The co-operative skills of the companies are extremely weak, only few large or medium size business of South Transdanubia has been able to build out a strong network of suppliers and universities, supporting organisations and advisory services play a very modest role in co-operation, too. The majority of the businesses are not innovation-oriented, their market skills are deficient, their market position is weak, and they do not carry out an intensive marketing activity. The other weak link of the innovation process is the limited range of innovation transfer and the related services, the putting of the R&D results into practical implementation. The number of business R&D places is low (less than half a dozen).

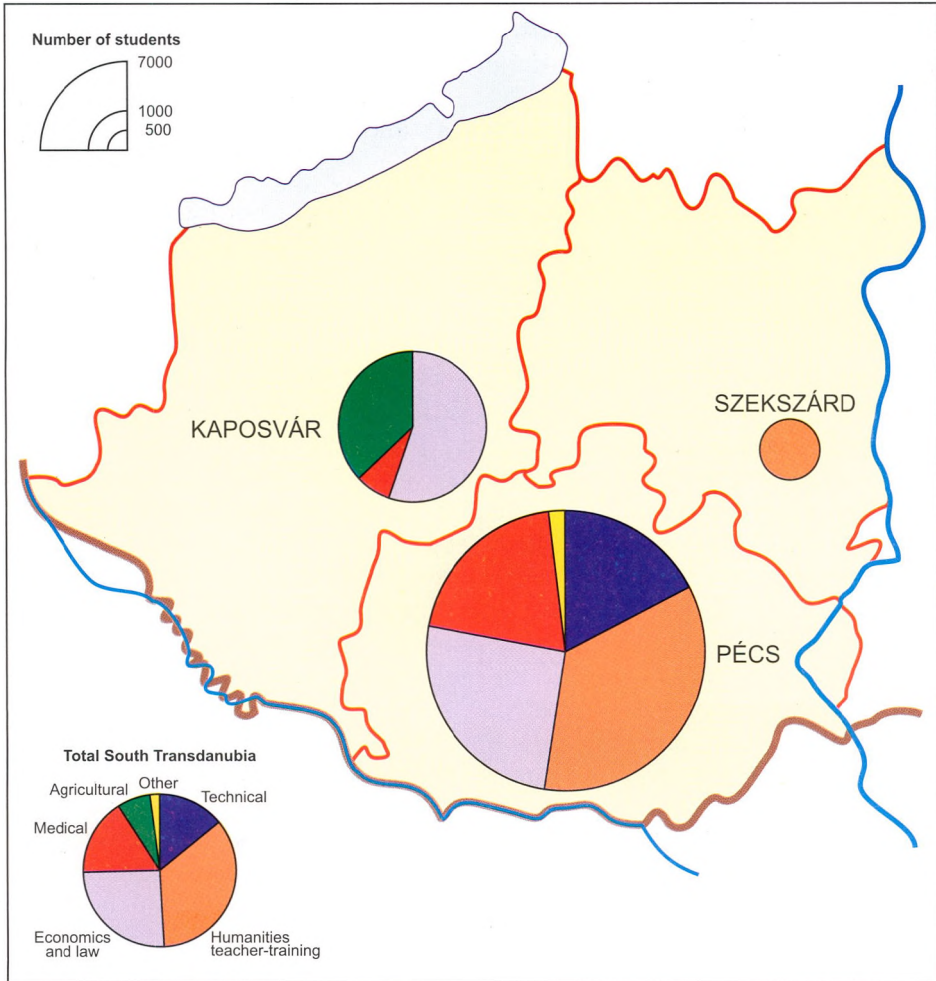
All these factors together are significant obstacles of the regional collaboration in the field of innovation development.

Regional Innovation Strategy outlook

Network development is seen as fundamental to modern forms of regional economic growth and innovation development, which facilitate inter-organisational learning linkages (*Asheim, B. T. 1996, Cooke-Morgan, 1998*). Construction of the *regional innovation networks* should be one of the key processes of the RIS implementation, identifying the need of involvement of a range of actors in the regional innovation system. In the following the factors will be summarised which the network building should be based in the region of South Transdanubia. The network building should be one of the key processes of the RIS implementation, identifying the need of involvement of a range of actors in the regional innovation system.

Figure 3

Disciplinary structure of the universities of South Transdanubia



Source: Horváth, Gy. (1998b) p. 214.

The network building process in South Transdanubia, adapting the European experiences, should be based on the following phases:

- The integration of innovative businesses into network building (the encouragement of SMEs to pursue innovative activities);
- The strengthening of the network links between the universities and industry and the working out of the form of operation for an entrepreneurial and research university;
- Development of innovation support infrastructure and public-private partnership between regional actors;

During the process of networking the organising, co-ordinating and supportive function of several organisations within the regional environment could be a part of the Regional Innovation Strategy, which should also include measures for co-operations promotion between firms and institutions of technological infrastructure (consulting, technology transfer, innovation management, advisory services). It is argued that such networks linking diverse type organisations are more important in the most successful regions than the presence of regional development authorities. On the other hand, in the less advanced regions regional development agencies play more significant role in catalysing activities of key actors and in-building of 'associationalism' and strategies in innovation field. The other important element the RIS management is facing is the extent of involvement of both the entrepreneurs and the universities into the RIS process. It is necessary to ensure that the RIS should be a demand driven approach with a strong emphasis on businesses and particularly on SMEs. The major aim of the RIS strategy for the less developed regions of the accession countries is a demand-driven network building initiated and promoted by strong public (state) programmes and aiming at the appointment of industrially-oriented moderators. As *Landabaso* (1997) argued, without establishing the new forms of co-operation among regional innovation players, especially between the business and scientific sphere, and utilisation of regional skills and political capital in order to promote innovation-driven economic development, it will be impossible to reduce the technology gap among different nations and within certain countries.

The region of South Transdanubia has won its RIS application, in co-operation with the British Yorkshire and Humber and the Irish Shannon region, handed to "The Regional Innovation Strategies for the Newly Associated Countries" programme initiated by the EU Commission in 2001. For the economy of the region, only the implementation of the RIS strategy harmonising with the development priorities of the region can result in the abolishment of the former disadvantageous dependencies in the field of innovation (*Gál, Z. 2000b*).

The key element of the strategy is that it is business-led and that its primary customers are the businesses of the region. The primary task of the RIS is the creation of the appropriate institutional and organisational conditions that develop more efficient policies and actions for the promotion of regional innovation. In the South Transdanubian region, where the independent organisational and management system of innovation has not been established yet, the organisation of the RIS joins the institutional system of regional development. There is a strong consensus among regional policy makers that the number and the quality of the innovation networks within the wider framework of the regional innovation strategies can be increased with the help of the regional policy measures. This argument is supported by the fact that – most of the regions with strong innovation networks have – very influential and active political actors and regional development institutions (e.g. agencies).

For the working out of the RIS for South Transdanubia, actions and network building, it is indispensable to achieve a consensus among the regional players and to awake the consciousness of the regional actors about the objectives and expected benefits of the strategy- and network building. Rapid results and strategy building can only be expected from the organisation of a *regional development coalition* and from the active participation of the committed politicians in the whole process. The management team agreed that RIS has to build on the already existing institutions, involving them into the strategy making process rather than creating new organisations, which might cause the segmentation of the given institutional base.

The other important element the RIS management is facing is the extent of involvement of both the entrepreneurs and the universities into the RIS process. It is necessary to ensure that the RIS should be a demand driven approach with a strong emphasis on businesses and particularly on SMEs. However, there is a general reluctance of the Hungarian SMEs to become involved in business networks and entrepreneurs do not invest time and money in the network development, unless they do expect direct economic profits and beneficial linkages of networking.

Regarding the role of the universities in the innovation process it can be said that universities are the most difficult to adjust to the goals of the business sector. Universities follow their own different structural and cultural logic, making their business co-operation difficult. Easing university–industry collaboration, firms should not co-operate with the university as a whole but directly with the research teams instead.

The major objective of our RIS is that the finalised document has to reflect the ideas of the people of South Transdanubia, presenting a real picture of the conditions of innovation within the region, and operational projects based on the elaborated strategy have to serve efficiently the operation of the regional

economy. The regional innovation strategy is regarded as a “social development exercise” as well. The main task of it is the creation of the appropriate environmental and institutional conditions for the effective technology transfer and the increase of the innovative capacities of the regional economies, which ultimately creates a regional competitive advantage, a sustainable economic development, stable jobs and higher living standards for the region of South Transdanubia.

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AGRICULTURE AND RURAL DEVELOPMENT

Teréz Kovács

Historical overview

Hungarian agriculture retained all the features of the feudal estate until World War II. Over the nation as a whole large estates dominated but were complemented – subject to local peculiarities – by independent peasant farms or smallholdings. In contrast to this, in the eastern part of South Transdanubia, i.e. in the counties of Baranya and Tolna, something approaching what might be termed middle-class peasant farming had developed within the ethnic German community, which constituted about one third of the population of the area. These Germans had settled in Hungary after the expulsion of the Turks, albeit among other ethnic groups. This settlement process was carried out in three waves at the end of the 17th and at the beginning of the 18th centuries. On the one hand the German peasantry in South Transdanubia had larger family landholdings than the Hungarians, and on the other hand their farming methods were more intensive – for example, the vineyards around Villány and Szekszárd were for the most part German-owned.

In 1945 land reform was enacted, in which the upper limit to the size of a holding was fixed at 57 hectares (114 hectares in exceptional cases). Land in excess of this limit was sequestered, state farms were organised in place of the large estates and one third of all agricultural land was distributed among those agricultural workers with little or no land. In this period approximately 640,000 families in Hungary were each granted an average of three hectares of land.

A significant part of the German population living in Hungary was repatriated to Germany in 1947, and their lands, together with the rest of their goods, chattels and other real estate, were confiscated. Consequently, in the east, the south-east and in some of the central parts of the region the land for re-distribution exceeded the national average. This land was re-distributed not only among the local landless and poverty-stricken agricultural workers, but also

among the population who settled or were re-settled here from other regions. This new population comprised, in the first place, Hungarians who had been expelled from Slovakia, Hungarians from Romania who had first been re-settled in the Vojvodina (1941–1944), but who had then been forced to flee from there (the Székely, i.e. a Hungarian ethnic group in Transylvania), together with Hungarians – and also Germans – who had arrived from Croatia. People also migrated individually from the underdeveloped counties of Hungary (Szabolcs-Szatmár-Bereg, Hajdú-Bihar and Heves).



Baranya county has very old traditions of viticulture and viniculture. *Villánykövesd* is a valuable synergy of the old traditions of folk architecture and wine production. (Photo by György Mánfai)

The new landowners, arriving, as they did, from several different regions, attempted to carry on the cultural traditions brought from their individual home territories after their re-settlement – something that did not always meet with success. In addition they were unskilled in viticulture and in the local, intensive forms of animal husbandry. They were, in fact, much more used to extensive pasturing methods, although here they lacked the necessary grasslands. In consequence, the population exchange that occurred in the area did not help to maintain or develop the agricultural traditions characteristic of this region; nor did these new settlers feel attached to the region.

In 1948 the first collectivisation of agriculture was started and during the 1950s co-operative farms were organised in every village. Those landowners

who had so far farmed independently were turned into junior members of the co-operative. As a result of independent farming being made totally impossible, many of the more able landowners were forced to leave their villages and look for jobs in the towns – in industry and in mining. In 1959 a new (and this time total) collectivisation of agriculture was carried out. All land and livestock were taken over for collective farming. For the members of the agricultural co-operatives only those larger gardens which adjoined their houses were left to them for individual farming, although in the absence of such a garden they were later allowed a piece of land – of half a hectare per head – for private cultivation.

1967 saw the start of a high level of state subsidy for agriculture, triggering a boom in agricultural production. A biological and technological revolution then occurred, as a result of which this huge rise in production yielded, for example, an average of 2 tons of wheat per hectare in 1965, 4 tons in 1974 and 5.4 tons in 1984. Village-dwellers typically had two jobs. On the one hand they worked as employees of the large agricultural concerns (the state and co-operative farms) or in large-scale factories locally, i.e. in the nearest town. On the other hand they also worked in the small-scale, individual agricultural plants. The larger agricultural concerns, however, then absorbed these individual small plants. The workers in the small plants simply provided their labour, so allowing the larger enterprises who took over the smaller ones to boost their procurement, production and sales figures. This type of 'individual economy' did not promote the principle of independence. Moreover, in South Transdanubia the large agricultural concerns were stronger than the small ones when compared to the Great Plain region, for example and in consequence there was a tendency to reduce employee numbers. In the 1970s giant agricultural organisations were established, in some places comprising 5,000 to 10,000 hectares – i.e. the entire cultivable area of several villages.

The main target of agricultural production was to maximise output. All manufactured products could be sold on the Soviet and Eastern European markets without restriction, but Hungarian agricultural products were also sold in West European markets.

From the mid-1980s the state accumulated more and more debt and there were fewer resources available to subsidise agriculture. This put an end to the (roughly) 20-year-long glory phase of Hungarian agriculture and the sector slowly sank into decay, leading to drops in the labour force and in production.

Privatisation of agriculture

After the systemic change giving the agriculture in private ownership happened in a different way in Hungary than in the other Central and Eastern European countries. In the course of privatisation land and other property was treated separately.

Land was given to the former proprietors or their descendants if they requested it and to the agricultural workers of the times of the systemic change who did not use to have lands before the socialist era. The former proprietors did not get their own estate or that of their ancestors back, but another equivalent parcel of land, often not even in the same village where it had been taken, but in another one nearby. Only a smaller part of those people who claimed their lands back started farming, the majority let their plots by lease or sold them or even the indemnification notes to be exchanged for land at a low price for lack of equipment, capital and skills. In 1992 the property of the co-operatives beyond land was also distributed among the workers in the form of shares, but this property could only be taken out of collective farming into individual ownership in a fixed period (for two months). Humble and elderly people sold these shares below par to those who wanted to make a living in agriculture in the long run, and incidentally to speculators. Finally in 2002 the state bought up the unsold shares at par.

In the three counties of Southern Transdanubia about 240,000 people got land and 65,000 got co-operative shares at the beginning of the 1990s.

The majority of the co-operatives were wound up, the others were turned into diverse economic organisations. The transformation was executed in many steps. Since 2000 the most common form of economic organisations is not the co-operative any more, but the joint stock company and the limited company.

In Southern Transdanubia there are 1,417 economic organisations altogether. They cultivate 676,000 hectares. An average economic organisation tills a plot of 477 hectares. The parcels are either in the ownership of the members of the economic organisations or they take them by lease from outsiders. (In Hungary only private individuals can have land property according to the effective land law.) Apart from this 122,824 individual farms operate in the region tilling 322,500 hectares altogether. In Baranya and Somogy only 26 to 28% of land is used by the individual farms; this is well below the national average (40.5%), while the ratio is considerably higher in Tolna (45.8%). (*General Agricultural Register*, 2000 [GAR-2000].)

State farms have been privatised or wound up. (On a national scale only about a dozen of them are still in majority state ownership today.) The processing of agricultural products was privatised back at the beginning of the 1990s. Most of the customers were foreigners. Several agricultural processing

establishments (the tinned food factory in Szigetvár, the poultry processing plant in Pécs as well as the meat processing plants in Kaposvár and Szekszárd) were wound up or their capacities were drastically reduced. The decrease in the processing capacity is also characteristic of the surviving food industry companies. At the same time, there have also been mergers of processing plants of identical profiles situated in different counties in some places. Apart from a segment of the milling industry, agricultural producers do not own the processing industry that often puts the primary produce farmers in a defenceless situation.

The agricultural processing industry has significant export capacities in Southern Transdanubia, however, the majority of agricultural produce leaves the region unprocessed.

Characteristics of agriculture in the region

From the point of view of agriculture, Southern Transdanubia is the third most important region in Hungary after the Southern Great Plain and the Northern Great Plain regions. The role of agriculture is significant here. Its share of the GDP amounts to 8.6% that is twice the national average (4.2%). 14.7% of all Hungarian plough-land, hunting, forestry and fishing products come from the region. The proportion of the employees of the sector runs to 8.5% on a national scale, but to 16.2% in Southern Transdanubia (*Regional Statistical Yearbook*, 2001). The ratio of agricultural employees comes to 6.2% on a national scale (*Agricultural Statistical Yearbook*, 2001), while it is reasonably higher in the region.

Nevertheless, the role played by agriculture in the work and income of the local population is best verified by the fact that in 2000 some 264,000 people, i.e. 27% of the inhabitants pursue agricultural activities on their own farm or on the farm of their families. The national average of 20% was significantly lower than this (*GAR-2000*). The majority of this agricultural activity, however, only serves subsistence or income supplement. In minor settlements practically only agriculture and forestry provide local employment and means of subsistence apart from the local authority. There are a lot of micro-village areas short of towns in particular in the counties of Baranya and Somogy. The largest single backward rural area of the region can be found along the Dráva river.

In Hungary the volume index of agricultural production in 2000 only amounts to 70% of the 1990 figure. The set-back in production was particularly significant as regards sheep, pig and cattle farming as well as rough and fermented fodder. At the same time, the extension of lands put to grain crops increased. A significant part of farms only deal with plough-land plant cultivation

and do not breed live-stock which is by all means an undesirable phenomenon from the employment point of view.

The distribution of land use in Southern Transdanubia is shown in *Table 1*.

The proportion of grassland is below the national average in the whole of Southern Transdanubia. The distribution of land use shows the biggest differences compared to the national average in Tolna; the ratio of plough-lands and vineyards is higher while the ratio of forests and grasslands is lower. Somogy is the second most afforested county in Hungary (see *Figure 1*). With regard to cultivating grain crops, the highest average yields are attained in Baranya and in particular in Tolna on a national scale. More than half of the soy production of the country is cultivated in Baranya. This, among others, can be attributed to the production and integration activity of the Agricultural Production and Trade Joint Stock Company in Bóly in majority state ownership situated here.

Table 1

Distribution of land use, 31 May 2001

Land use	Baranya		Somogy		Tolna		Southern Transdanubia		Hungary	
	1,000 hectares	%	1,000 hectares	%	1,000 hectares	%	1,000 hectares	%	1,000 hectares	%
Plough-land	228.3	51.5	254.5	44.9	214.2	62.5	697.0	51.5	4516.1	48.5
Garden	3.5	0.8	4.4	0.8	3.0	0.9	11.0	0.8	97.8	1.1
Orchard	1.1	0.3	3.2	0.6	1.7	0.5	6.0	0.4	97.4	1.0
Vineyard	3.2	0.7	4.0	0.7	5.1	1.5	12.3	0.9	92.9	1.1
Grassland	33.9	7.6	51.7	9.0	29.9	8.7	115.5	8.5	1061.2	11.4
Forest	103.8	23.4	162.1	28.6	46.3	13.5	312.2	23.1	1771.7	19.0
Reeds	1.0	0.3	4.9	0.9	1.4	0.4	7.3	0.6	60.4	0.7
Fish-pond	0.9	0.2	2.9	0.5	2.2	0.7	6.0	0.4	32.3	0.4
Arable land	375.7	84.8	487.7	86.0	303.9	88.7	1167.2	86.2	7729.6	83.1
Uncultivated land	67.6	15.2	79.6	14.0	38.9	11.3	186.2	13.8	1573.8	16.9
Total	443.3	100.0	567.3	100.0	342.8	100.0	1353.4	100.0	9303.4	100.0

Source: Regional statistical yearbook, 2001.

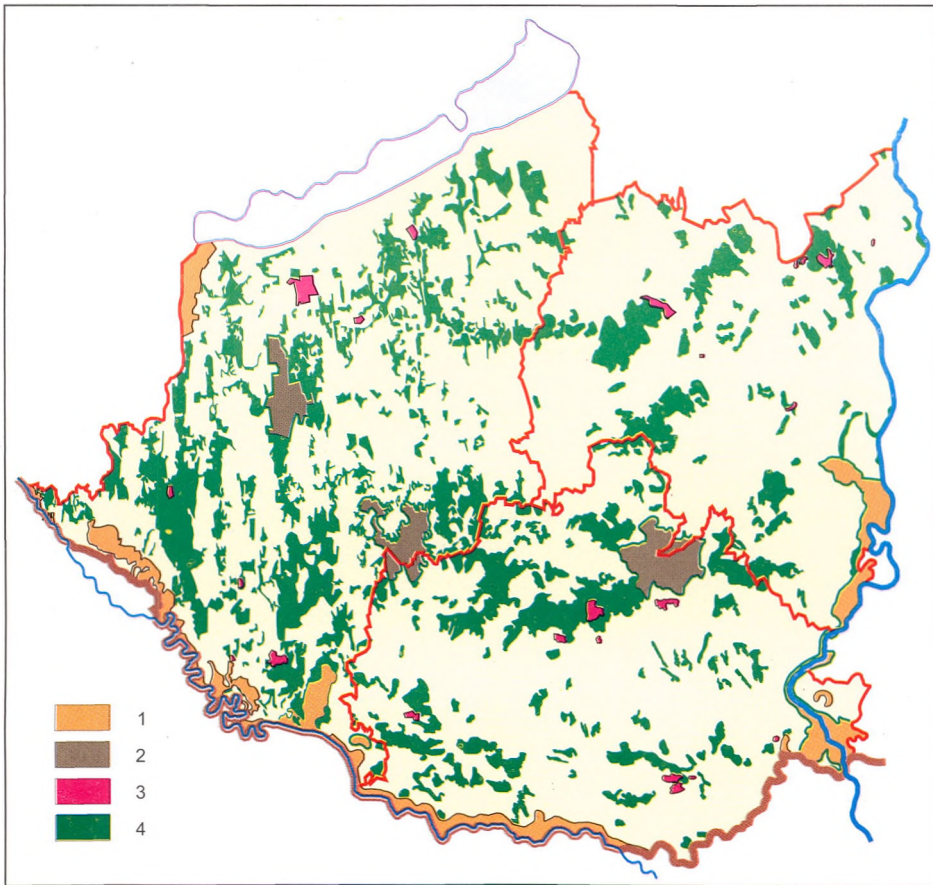
With regard to cultivating vegetables, the region does not belong to the leading regions, although the soil and climate conditions make early plough-land vegetable cultivation possible. The most vegetables in the region are grown in Somogy (tomatoes, peppers, sweet corn and green peas) and watermelons and honeydew melons in Baranya. The greatest part of viti- and vini-culture is also pursued in Somogy, for the most part in the historical wine re-

gions along Lake Balaton. Raspberry, strawberry and peach cultivation is also significant in this county.

In Hungary live-stock density is very low compared to the arable lands, for example 14 cows/100 hectares, 86 pigs/100 hectares and 19 sheep/100 hectares (Agricultural Statistical Yearbook, 2001). Regarding livestock breeding the indices of Tolna exceed the national average by far, in Baranya similarly good results can only be demonstrated concerning hen and pig stock. At the same time, livestock volume in Somogy falls significantly short of the national average.

Figure 1

Nature reserve and forest areas in South Transdanubia



Key: 1 – National park; 2 – Landscape protection area; 3 – Nature conservation area; 4 – Forest.

Source: Designed by the author.

Objectives of agriculture and rural development

In 1999 the Southern Transdanubian agrarian structure and rural development programme for the years 2000 to 2006 was drafted (SAPARD) which includes a detailed analysis of the region as well as the strategic objectives and priorities of rural development in Southern Transdanubia. Among others, the above mentioned document was also taken into consideration in the course of elaborating the SAPARD plan for Hungary. In 2000, with the exception of Pécs, all local authorities of Southern Transdanubia were organised into 33 so-called SAPARD micro-regions and the situation analyses and strategic as well as operative programmes of these SAPARD micro-regions were worked out with the assistance of experts. Taking also the contents of these programmes into account, we eventually pinpointed the following objectives:

- In the past, agriculture was responsible for producing food-stuffs. There are many people in the region as well as in the whole country who still share this opinion today. For this very reason, there is a need for paradigm change in this field. For paradigm change which pays more attention to the landscape-sustaining and employment function of the agriculture than before. In connection with this a greater emphasis must be laid upon the diversification of the agriculture and alternative rural development, i.e. beyond agriculture.
- It can be put down for an important improvement that great many nature and landscape reserves have been selected in the region, there is a national park (the Danube-Dráva National Park), furthermore, the proportion of afforestation, according to the Hungarian standard, is high (see *Figure 1*). All this can build an important basis for developing the landscape-sustaining function of the agriculture in the region.
- The monocultural character of the agriculture ought to be reduced and a lot more attention should be paid to the headway of labour-intensive bio-farming than so far, in the domains of vegetable production, plough-land plant cultivation as well as live-stock breeding. The prevalence of pasturing animal husbandry must also be urged and fostered. In order to adopt these, human resource training and practice-oriented education is needed, particularly in the underdeveloped rural areas.
- The development of the rural areas comes to a deadlock mainly because there are not enough work places in the small and medium-sized towns for the inhabitants of the surrounding villages. The vision of rural development includes the creation of these work places. The possibility to create the new work places depends upon the general economic development of the country and regional development, and more precisely upon

the development of accessibility in particular. Nevertheless, there is also a great need to broaden the spectrum of local employment opportunities, for the most part in the field of developing local infrastructure, small and medium-sized enterprises and rural tourism.

- At the same time, for the sake of integrating uneducated rural labour force, the adjustment of active welfare means, in particular communal work into rural development will be needed for several years to come.

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POPULATION AND HUMAN INFRASTRUCTURE

Péter Póla

Demographic processes in the region

Among all of the regions of Hungary the third largest, South Transdanubia, has the smallest population (currently nearly one million) and so is at the same time the most sparsely populated region (see *Table 1*). The most densely populated town in South Transdanubia is Pécs with about 17% of the region's population. The three county towns have a total of 267,000 inhabitants, and so more than a quarter of the population of the entire region lives in the county towns.

Table 1

The area and population of the regions

Regions	Area (km ²)	Population ('000s)	Population density (people/km ²)
<i>South Transdanubia</i>	14,169	975	69
Central Hungary	6,919	2,844	411
West Transdanubia	11,209	984	88
Central Transdanubia	11,236	1,107	99
Northern Hungary	13,429	1,269	95
Northern Great Plain	17,729	1,522	86
Southern Great Plain	18,339	1,342	73
Totals	93,030	10,043	108

Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2000.

The decrease in the population of South Transdanubia can easily be traced in the towns as well as in the villages using the data produced by the Central Statistical Office (see *Tables 2 and 3*). Although the decrease in the urban population is no greater than the national average, the village population has also diminished in the past decade. The consequence is that there are over 10,000 people fewer living in the region than 12 years ago. This implies the existence of demographic processes that will probably have to be considered as permanent when development concepts are elaborated – and which will also essentially limit both the directions and tasks for human infrastructure development.

Table 2

The proportions of urban and village population in the regions

Regions	Proportion of urban population, %		Proportion of village population, %	
	1996	2001	1996	2001
Central Hungary	83.4	79.5	16.6	20.5
Central Transdanubia	58.4	56.8	41.6	43.2
West Transdanubia	56.7	56.1	43.3	43.9
South Transdanubia	55.9	55.6	44.1	44.4
Northern Hungary	50.7	49.6	49.3	50.4
Northern Great Plain	63.3	61.9	36.7	38.1
Southern Great Plain	68.2	66.8	31.8	33.2
Totals	66.2	64.1	33.8	35.9

Source: Regional statistical yearbook, 2001.

Table 3

Changes in population in towns and villages in the regions

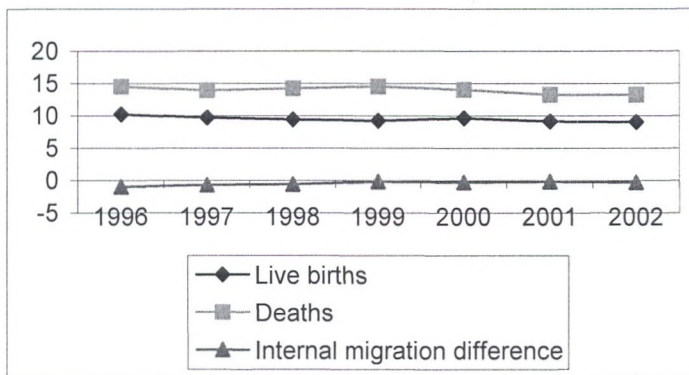
Regions	1990	2002	1990	2002	Change %	
	Towns ('000s)		Villages ('000s)		Towns	Villages
<i>South Transdanubia</i>	570.8	552.7	444.9	440.7	-3.2	-0.9
Central Hungary	2,468.6	2,248.7	497.9	580.3	-8.9	16.5
Central Transdanubia	653.0	636.8	461.3	483.8	-2.5	4.9
West Transdanubia	566.4	562.1	444.0	440.8	-0.8	-0.7
Northern Hungary	674.2	643.1	649.3	653.3	-4.6	0.6
Northern Great Plain	968.1	964.8	578.5	594.2	-0.3	2.7
Southern Great Plain	935.3	916.8	462.3	456.4	-2	-1.3
Totals	6,836.6	6,525.4	3,538.2	3,649.4	-4.6	3.1

Source: Regional statistical yearbook, 2002.

A natural decrease is characteristic of all Hungarian regions, but the data from South Transdanubia are even more unfavourable than the national average. The picture is even worse if, apart from the indices showing natural increase/decrease, we also take into consideration internal migration differences. Whilst the more developed regions show a gain from migration, there is a migration loss which further contributes to the decrease in the population of South Transdanubia. As illustrated by *Figure 1*, the number of live births constantly falls short of the death rate and the differences in migration levels tend, in consequence, to be negative in South Transdanubia (see *Table 4*).

Figure 1

The development of demographic processes in South Transdanubia



Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2002.

It will be more useful to reveal and analyse first of all those causes of population decrease which have nothing to do with the causes of the development of general national trends, since these processes can – or should – be stopped by eliminating the relevant special local factors.

The population decrease is accompanied by a rise in the ageing index. In 2001, 16.2% of the population was under 15, while the ratio of those over 60 was 20.7%.

Although this proportion corresponds to the national average, we must not ignore the fact that the ratio has grown significantly worse over the past five years (from 17.7%–19.6% to 16.2%–20.7%) a factor also reflected in the deteriorating activity rate (see *Table 5*).

Table 4

Live birth and death rates and migration differences

Regions	Internal migration difference		Number of live births per 1,000 inhabitants		Number of deaths per 1,000 inhabitants	
	1996	2002	1996	2002	1996	2002
<i>South Transdanubia</i>	-1.0	-0.3	10.7	9.0	14.4	13.2
Central Hungary	1.2	1.6	9.7	9.3	14.4	13.0
Central Transdanubia	0.4	0.7	10.9	9.3	12.6	12.1
West Transdanubia	0.8	1.3	10.2	8.7	13.5	12.6
Northern Hungary	-1.6	-1.9	11.5	10.0	14.4	13.6
Northern Great Plain	-1.4	-1.9	12.7	10.6	13.2	12.6
Southern Great Plain	0.3	-0.7	10.8	9.0	15.0	13.7
Total			10.8	9.5	14.1	13.1

Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2002.

Table 5

The proportions of young and old in the population of the regions

Regions	Proportion of population under 15, %		Proportion of population over 60, %	
	1996	2001	1996	2001
<i>South Transdanubia</i>	17.7	16.2	19.6	20.7
Central Hungary	15.8	14.6	20.1	21.4
Central Transdanubia	18.4	16.6	17.7	19.4
West Transdanubia	17.3	15.6	19.5	20.4
Northern Hungary	18.7	17.6	19.8	20.8
Northern Great Plain	19.9	18.7	18.1	18.9
Southern Great Plain	17.7	16.3	20.5	21.4
Total	17.7	16.3	19.5	20.6

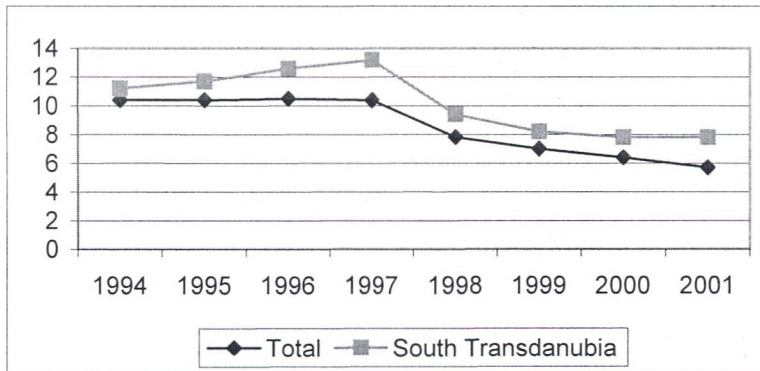
Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2001.

General survey of the labour market in South Transdanubia

According to the Central Statistical Office survey the unemployment rate in South Transdanubia amounts to 7.8% (see *Figure 2*), although the rate as measured by the county labour offices is significantly higher than that of the CSO survey. In the three South Transdanubian counties, according to the calculations of the county labour offices, the rate had reached 11.4% in Baranya, 11.8% in Somogy and 9.8% in Tolna at the end of 2002. Nevertheless, significant differences can be observed between the micro-regions and the representatives of the labour office concerning these data. For example, whilst the unemployment rate in the Pécs area is 5.4%, that in the area of Sellye is 34.3%. The employment situation is above average in areas close to the major towns. Some areas in Somogy are facing considerable problems (Barcs – 17.3%, Tab, Nagyatád – 14.9%, Marcali – 14.8%) as well as Tamási in Tolna (15.5%), although they still fall short of the indices relating to the Ormánság area. Consequently, it is no accident that the document entitled *Regional Development Concept and Programme of South Transdanubia* should include solutions to the employment problems in the critical areas as a vital development task for the region (see *Table 6*).

Figure 2

The development of the unemployment rate in south transdanubia
and in the country as a whole



Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2001.

Table 6

Activity and unemployment rates in the regions

Regions	Activity rate, %		Unemployment rate, %	
	1996	2002	1996	2002
<i>South Transdanubia</i>	53.1	50.5	8.6	7.8
Central Hungary	58.6	56.9	7.6	4.3
Central Transdanubia	57.1	55.9	9.6	4.3
West Transdanubia	60.2	58.5	6.6	4.2
Northern Hungary	51.6	47.8	14.6	8.5
Northern Great Plain	51.4	48.3	12.0	7.8
Southern Great Plain	55.1	52.4	7.7	5.4
Totals	55.6	53.3	9.2	5.7

Source: Central Statistical Office labour force survey.

Among current training activities in the labour market those of the Regional Labour Force Development and Training Centre of Pécs are worthy of mention and an increasing number of firms with HR (human resource) development strategies utilise its services. It participates in the elaboration of programmes to boost the economy of the region, in handling juvenile unemployment (in co-operation with the labour office) and in providing forms of training relevant to the labour market throughout the region (*PTE FEEFI, 2000*).

Apart from the labour office operating in the three counties, certain civic organisations and training centres also play an important role in coping with unemployment problems. Where such problems exist it is essential that co-operation between the stakeholders and the organisations in question should improve. The task in South Transdanubia is essentially made up of two parts. On the one hand, employment possibilities need to be encouraged in order to influence the demand side of the labour market whilst on the other hand the supply side needs to be improved by making training and vocational training better and more flexible. It is, however, an unhappy situation that unemployment, and, in particular, the proportions of career-starters and of the long-term unemployed, has risen over the past year both in Somogy and Baranya counties. Work opportunities provided by seasonal activities such as tourism, medical tourism, agriculture, the building industry, catering and commerce still do not contribute to long-term employment possibilities to any serious extent.

The region will need to conform to the economic division of labour of the European Union in a flexible way, adjusting its strategic branches evolving after the structural change and the development of its human resources in the correct direction. In this light the employment policy development concept (*BMMK*,

2000) embracing the fundamental strategic goals which follow would seem to be well-established also:

- To encourage job-creation and structural change by the supplementary use of labour, besides which promoting employment – whilst maintaining the level of unemployment and social benefits;
- To develop human resources by improving the educational level of employees and employers and by developing their skills, abilities and work culture;
- To create a climate of equal opportunity as the means to promote the integration or reintegration of social groups disadvantaged in relation to employment in both the primary and secondary labour markets;
- To reduce regional differences in employment;
- To provide information for the main players in the labour market and to create partnerships to meet the regional employment policy requirements of EU accession.

Indices and the institutional system of education, training and vocational training

Primary and secondary education

The most densely populated town of the region, Pécs, plays the dominant regional role in education, a factor which determines the quality of the work-force not only of the city, but also, in part, of South Transdanubia.

Nursery care is provided in the region, although there have even been institutional mergers in recent years owing to the decreasing number of children. In general, under-finance is typical of nurseries, resulting in a lack of development expertise, and it is also the case that physical conditions for the care of handicapped children are not available in the majority of nurseries.

The fundamental educational infrastructure of the region is adequate in terms of quantity. Additionally, the long-term demographic decline clearly reflected in the presentations of the demographic processes is also causing problems in the field of public education, in the first place due to the inadequate maintenance of the institutions. Changes within the social and economic environment of schools have fundamentally altered the external circumstances of primary and secondary educational institutions in that, in addition to public schools, a number of foundation, church and private schools have now ap-

peared. It now appears that some kind of competition has evolved among the schools.

Providing handicapped children with school-based education of an appropriate quality constitutes a problem for elementary schools as well. Furthermore, "the small settlements of the region are not adequately staffed by professional teachers, there being not only a shortage in this particular sector of the labour force, but also of funds to employ experts on a part-time basis. For similar reasons foreign language teaching cannot be provided in the smaller settlements." (PTE FEEFI, 2000).

There are no quantity problems in the secondary schools of South Transdanubia, either (see Table 7). The decrease in the number of pupils has also affected these schools. There is increasingly fierce competition among grammar schools and schools operating eight- and six-grade educational systems have appeared. Competition is also apparent in the increasing number of offers of specialised training.

Table 7

Data concerning educational institutions in the regions

Levels	Nursery	Primary	Secondary		Higher education		
Regions	Capacity per '000 population	Institutions	Grammar schools	Vocational schools	Institutions	Teachers	Students
South Transdanubia	37.1	466	58	86	3	2,491	30,191
Central Hungary	31.2	715	222	236	34	11,709	171,147
Central Transdanubia	36.2	441	77	107	9	1,256	23,322
West Transdanubia	35.9	488	62	106	4	1,198	24,230
Northern Hungary	35.4	638	66	105	4	1,136	21,215
Northern Great Plain	37.3	596	112	124	6	2,306	38,342
Southern Great Plain	35.5	512	89	128	5	2,767	40,854
Totals	34.9	3,856	686	892	65	22,863	349,301

Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2001.

Language skills in the region can also be considered good when viewed nationally. This, apart from the quality of language teaching, may be attributed to the high proportion of ethnic minorities (chiefly Germans and Croatians) in the population. This is one further reason why national education is also of crucial importance within human resource development. In the region several primary

schools offer education in German and Croatian and the language of education in numerous grammar schools is German, English, French or Italian.

In spite of the above, the qualification indices of the region are not good – and in particular the ratio of secondary school pupils, which is the lowest among all regions (see *Table 8–9*).

Table 8

The proportions of students in secondary and higher education
in the regions

Regions	The proportion in secondary education, %		The proportion in higher education, %	
	1996	2001	1996	2001
<i>South Transdanubia</i>	3.27	3.69	1.20	1.53
Central Hungary	3.85	4.53	1.43	2.95
Central Transdanubia	3.30	3.94	1.21	1.20
West Transdanubia	3.66	4.27	1.36	1.51
Northern Hungary	3.57	3.96	1.36	1.06
Northern Great Plain	3.37	3.97	1.31	1.44
Southern Great Plain	3.43	4.07	1.31	1.56
Totals	3.55	4.14	1.33	1.82

Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2001.

Table 9

The most important indices of school qualifications in the regions

Regions	Completed elementary education		Completed elementary education		Completed secondary education	
	Aged 15 and over, %	National percentage	Aged 18 and over, %	National percentage	Aged 25 and over, %	National percentage
<i>South Transdanubia</i>	0.7	140	87.7	98.4	33.7	85.3
Central Hungary	0.2	40	92.9	104.3	51.7	130.9
Central Transdanubia	0.3	60	90.2	101.2	35.9	90.9
West Transdanubia	0.4	80	90.0	101.0	37.4	94.7
Northern Hungary	0.6	120	87.1	97.8	35.0	88.6
Northern Great Plain	0.8	160	85.3	95.7	32.6	82.5
Southern Great Plain	0.5	100	86.9	97.5	33.5	84.8
Totals	0.5	100	89.1	100	39.5	100

Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2001.

Vocational training

Most current vocational school education is organised at central state or local government level. One undeniable advantage of this is the financial stability of vocational schools, even if this is at a low level. This system, owing to the nature of the funding and decision-making mechanisms, is unable to respond to labour market demands quickly enough and over the past ten years the basic headcount data of employment and vocational training have changed fundamentally. Due to demographic changes, vocational school education can only provide future skilled personnel needed by today's economy on a decreasing scale and labour shortages have appeared in certain employment fields. In the vocational schools of the past decade not only have the training profile and the vocation structure been changed, but also the conditions, content and quality of practical training. 41.2% of the pupils of vocational schools take part in practical activities in apprentice workshops within their school, 17.1% in apprentice workshops outside school, 7.3% in work-places outside school and 34.4% in small and private enterprises (OM, 1999). These ratios are significantly better in Europe; for example, in the German vocational training system practical training is at least twice as important and undertaken by pupils in economic organisations.

In general, as outlined in the regional development concept, an important priority of vocational training is the harmonisation of the school system with labour market requirements as well as with economic development needs.

Higher education and research & development

In 1367 King Louis the Great founded Hungary's first university in Pécs, at that time one of the first in Europe. Over the past few years the University of Pécs, in respect of both student numbers and the variety of specialisations offered, comprising faculties of Economics, Political Science and Law, Medicine, Engineering and Arts, as well as Natural and Social Sciences, has become one of the largest universities in the country. Besides the University of Pécs, the University of Kaposvár, which is mainly concerned with research into agricultural economics and the Szekszárd college faculty of the University of Pécs also play an important role in the region.

In South Transdanubia the number of people employed in the R&D sector is extremely low by international standards. However, the pace and progress of economic and social change as well as the competitiveness of a region is closely connected with standards of higher education and science-based workshops. These, apart from their role in traditional intellectual training and the study of science, play an important part in solving target-oriented R&D projects and

training society for fruitful participation in European integration and modernisation processes. Essentially, economic competitiveness also depends upon the extent to which we shall be integrated into the economic globalisation system, how rapidly we shall learn and apply its rules and how quickly and successfully we shall be able to dovetail our own – as well as foreign – mental capacities and the products of those into the economic processes. In this context those institutions which play a distinguished role in human resource development and those which are able to assure the international dimensions of the processes through their international connections, i.e. higher education and research institutions, are more highly valued.

It has already become evident, in elaborating the regional development plan for South Transdanubia, improving its IT facilities and drafting an operative programme related to the preparations for the information society, that one of the key issues of development in the region is to search out new opportunities by supporting R&D activity, with the prime purpose of tracing a new development path for the region. To achieve this, a strengthening the connections between multifunctional, higher education and the economy must be prioritised in South Transdanubia (see *Table 10*).

Table 10

The population with higher education in the south transdanubian region

Region	Completed higher education	
	Aged 25 and over (%)	National percentage
Baranya county	10.8	89.3
Somogy county	9.5	78.5
Tolna county	9.3	76.9
South Transdanubia	10.0	82.6
Totals	12.1	100.0

Source: Central Statistical Office, 1996 microcensus.

Culture and public education – one of the region's strengths

The cultural programmes available in South Transdanubia correspond more or less to the Hungarian average (see *Table 11*). It can be seen that the cultural indices of Pécs are the most favourable in the region, which can be attributed to historical roots. Although there has not been a great deal of related investment over the past decade in the city, it has managed to retain its cultural heritage. The cultural indices applying to Kaposvár are also worth mentioning. This is firstly due to its nationally renowned theatrical life that has had a positive effect on the cultural profile of the whole city. In this respect, improvements have been especially remarkable in the last decade. The third county town, Szekszárd, boasts a cultural life (including a German theatre) of regional significance and, as with Pécs, many people are also attracted by the festivals connected with wine.

Table 11

Cultural institutions in the regions

Regions	Theatre performances	Cinema performances	Cultural institutions	Creative communities	Museums	Libraries
<i>South Transdanubia</i>	1,029	28,575	496	1,052	113	578
Central Hungary	6,136	213,857	373	1,948	177	178
Central Transdanubia	956	26,364	433	965	108	409
West Transdanubia	1,092	45,375	733	1,130	103	635
Northern Hungary	928	37,947	448	1,057	112	480
Northern Great Plain	979	36,373	376	1,153	81	368
Southern Great Plain	1,184	37,875	399	1,188	121	258
Totals	12,304	426,348	3,258	8,493	815	2,906

Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2001.

In Pécs increasing importance is accorded to the creation of a “cultural industry” and the city is striving for a regional (but in many cases also national or even European) reputation by organising festivals of increasingly high standards. The city has expressed a wish to compete for the title “Cultural Capital of Europe”, which is also part of the process. This obviously requires a tremendous amount of work and development, however, and determination is an im-

portant step since this can create further opportunities not only for the city, but also for the entire region, even beyond its regional attractiveness.

The region clearly has the potential to create a widespread cultural industry. Apart from its great number of nationalities and cultural diversity, its ethnographic and folk art and even its civic traditions as well as its natural endowments, the World Heritage site of Pécs has a significant appeal also. However, the current infrastructure cannot be considered adequate either from a quantity or from a quality point of view.



The Burial and Memorial Chambers of Sopiane Cemetery from the late Roman Empire included in the World Heritage List in Pécs.

(Photo by László Körtevényesi)

Public health and the social sphere – signs of a crisis

One of the greatest social and economic problems of Hungary has long been the inadequate standard of health care and the severe financial problems of public health. This not only causes problems for the central budget, but in many cases also creates difficulties for the local authorities operating the institutions in question. Although a comprehensive reform of public health is long overdue nothing has yet been achieved. Consequently, the system continues to be unable to appropriate resources effectively whilst more and more resources are necessary even to maintain obsolete and worsening conditions and without

these the conditions and standards of health care will continue to deteriorate in most institutions. Furthermore, most social care responsibilities are delegated to the public health sector, since the development of its own institutional background is below average. This situation essentially determines the health care standards of individual regions also.

The public health network of South Transdanubia corresponds to the national average (see *Table 12*). The hospitals, as most Hungarian hospitals, struggle with financial problems. Basic health care is in practice provided by the general practitioner (GP) system and most GPs and paediatricians have continued their activity as business undertakings. In the small village areas of the region and in some areas of Somogy county accessibility constitutes a minor problem.

The social care system, especially in the light of demographic processes calls for significant improvement with regard to both its quantitative and qualitative parameters.

Table 12

Hospital provision in the regions

Regions	Hospital beds per 10 000 inhabitants	Utilisation
<i>South Transdanubia</i>	74	79.2
Central Hungary	93	80.9
Central Transdanubia	70	81.0
West Transdanubia	80	78.1
Northern Hungary	72	81.1
Northern Great Plain	74	75.2
Southern Great Plain	72	78.3
Totals	79	79.4

Source: Statistical Yearbooks of Baranya, Somogy and Tolna Counties, 2001.

Housing conditions

As is also shown in the tables below, the stock of housing units in the region exceeds the average in terms both of size and of the number of rooms, although the basic facilities of the units are not so good (see *Table 13–14*). According to CSO data from 2001, 96.8% in the region have bathrooms, 79.1% have gas and 67.1% have sewerage.

In respect of the number of units built per 10,000 inhabitants, however, there is a significant shortfall from the average. While 22.2 units per 10,000 people were built in South Transdanubia in 2001, the national average amounted to 27.5.

Table 13

Room numbers and average size of housing units in the regions (m²)

Regions	1 "space"	1 room	1,5 rooms	2 rooms	2,5 rooms	3 rooms and over	Average m ²
<i>South Transdanubia</i>	0.5	4.5	13	24.7	25	0.5	83
Central Hungary	0.2	12.9	21.8	33.2	17.1	14.8	66
Central Transdanubia	0.6	7.7	15.3	35.5	15.6	25.3	77
West Transdanubia	0.1	7.9	16.6	33	20.2	22.1	79
Northern Hungary	0.1	9.4	14	30.1	23.3	23.1	76
Northern Great Plain	0.1	8.2	13	35.5	22.5	20.7	79
Southern Great Plain	0.2	9.6	17.5	27.8	18.1	27.6	81
Totals	0.3	9.5	17	31.8	19.7	21.7	75

Source: Statistical Yearbooks of Baranya, Somogy and Tolna Counties, 2001.

Table 14

Housing stock in the regions

Regions	Housing stock			Residents per 100 units	
	1990	2001	2001:1990 (%)	2001	2001:1990 (%)
<i>South Transdanubia</i>	371,783	383,688	103.2	259	95.0
Central Hungary	1,143,388	1,219,820	106.7	232	89.3
Central Transdanubia	404,730	423,100	104.5	265	96.2
West Transdanubia	362,523	385,899	106.4	260	93.5
Northern Hungary	486,568	497,736	102.3	260	96.3
Northern Great Plain	561,709	588,620	104.8	265	96.5
Southern Great Plain	558,923	577,777	103.4	238	95.4
Totals	3,889,624	4,076,640	104.8	250	93.8

Source: Statistical yearbooks of Baranya, Somogy and Tolna counties, 2001.

Summary

In the region a long-term demographic decline is visible which must be taken into account in elaborating development strategies. However, it would be a useful exercise first to determine and analyse the causes of this population loss, which have nothing to do with the causes of the development of general national trends, in order that these trends can be halted by eliminating special local factors.

In respect of the labour market the solution to unemployment problems in the critical areas must be treated as a priority. An important task of vocational training is the harmonisation of the school system with labour market requirements as well as with economic development needs. In higher education a strengthening of the connections between multifunctional higher education and the economy must be given priority.

Public health and the social care system, especially in the light of current demographic processes call for significant improvement, although this essentially cannot be influenced at local level.

The region has the potential to create a broadly based "cultural industry", although the infrastructure background for this cannot be regarded as adequate either from the point of view of quantity or of quality.

In general, the region must conform to the economic division of labour of the European Union in a flexible way, adjusting its new strategic branches and the development of its human resources accordingly.

Strengths of the region:

- Higher education institutions and diversity of training options.
- A relatively high proportion of educated population with a work culture.
- The highest degree of foreign language skills in the country.
- Cultural and ethnic diversity and cultural heritage.

Weaknesses of the region:

- An ageing population and migration loss;
- Unemployment problems, especially in certain micro-regions;
- Insufficiently flexible vocational training system;
- Shortcomings in technology transfer;
- Problems of the social care system.

Opportunities of the region:

- University, innovation, conditions for creating a knowledge-based economy;
- An active labour market policy with the relevant institutional system.

Threats of the region:

- Further deterioration of the economic activity rate;
- An educated labour force not integrated into the economy; permanent migration loss;
- Incurable unemployment in certain areas.

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CHARACTERISTIC FEATURES OF INTERMEDIATE ADMINISTRATION

Ilona Pálné Kovács

Regional co-operation before the systemic change

Since the foundation of the state the territorial units comprising Hungary have been its counties. The ideas of structural reform of territorial administration and of the need to establish regions larger than counties have often been raised in the course of history, but, nevertheless, administration essentially follows the county pattern even today.

However, regional co-operation and regional thinking do have certain traditions in South Transdanubia. In 1971 the government established the so-called 'planning-economic districts' with the South Transdanubian district comprising four counties, namely Baranya, Somogy, Tolna and Zala. Co-operation by individual county councils within these territorial units – essentially to serve planning purposes – was strongly urged by the government and yet, despite the formal framework actually created, no truly strong connections were formed and no common regional development plans were elaborated. The allocation of resources and development policy was still largely managed on the basis of county interests.

In the 1980s the topic of regionalisation virtually disappeared from the agenda, whilst the strengthening and institutionalisation of the internal system of relations of urban agglomeration areas assumed primary importance instead. In the 1970s and 1980s research conducted in the region by the Transdanubian Research Institute (DTI) revealed that there was a distinct lack of synchronisation between the economic-social-infrastructural spatial processes and territorial administration and also that, even if there was no political intention to introduce structural reforms, the factor and role of co-operation and collaboration needed to be encouraged (*Bihari, O. 1981*).

The establishment of county self-government following the systemic change

The systemic change brought about significant changes for territorial administration in respect of content, power politics and also structure. The introduction of the local government model unleashed the energy latent in local society and the efforts of villages and towns towards autonomy showed themselves in independent development aims. However, county government – for the first time in Hungarian history – lost their dominant roles in such functions as integration, the allocation of resources and planning. The positive change in the power structure and in the decentralisation of settlements, however, also triggered undesirable consequences in practice. The fragmented settlement administration model (cf. the paper by Edit Somlyódyné Pfeil) hampered high-quality, cost effective and co-ordinated organisation of services and of administrative and regional development tasks. In the field of co-operation among settlements county governments can only play a very limited role. In South Transdanubia this phenomenon is the source of particularly large problems since the settlement structure is highly fragmented and the number of micro-villages extremely high. County governments have neither the resources, nor the competence to provide significant help to municipalities. Their responsibilities are mainly limited to the maintenance of those institutions that provide varying public services in health care, cultural, education, welfare or child-welfare over the whole or the greater part of the county. More than one hundred institutions are maintained by the three county governments of South Transdanubia that are of crucial significance in certain domains (e.g. hospitals, libraries, secondary schools and old peoples' homes). One of the peculiarities in undertaking such responsibilities at county-level is that the county town, being itself of county rank, is also entitled to maintain similar institutions. Experience shows that such division of labour between the two types of local government is not always perfect; there are certain functions in parallel and it is rare that governments actually collaborate in the maintenance of the institutions in question. The pursuit of self-sufficiency by local governments is demonstrated clearly by the fact that after the systemic change a great number of county-level institutions either came to be maintained at settlement level or their assets were distributed among several settlements (e.g. county water-works, spa companies, cemeteries and roads).

Naturally, county assemblies, as organisations with directly elected bodies of representatives since 1994, do not only execute obligatory service tasks as ordained by law; they also strive to further the social-economic development of the counties by their own means. It has become typical that county governments do not only implement centrally ordained plans (rural planning schemes,

environmental protection concepts and public education development plans), but they also elaborate various health-care, cultural, public education, social care, regional and rural development, economic concepts at the same time. Although county governments have virtually no development resources of their own or any significant commercial assets at their disposal (most of the latter having already been sold), nevertheless, through their official, professional and organisation capacities and by their ability to capitalise on political interest, they are still the major constitutional actors of the counties with strong political legitimacy. Thanks to this county councils can boast of developed international relations and are members of many of those international organisations which unite the regions of the member states (for example, the Assembly of European Regions, the Alps-Adriatic Working Community, the Federation of Danube Provinces etc.). For such reasons, the county councils, notwithstanding their limited competencies and means, are still, paradoxically, the most important connection-forming centres in the regions and, thus, significant promoters of regional cohesion also (*Pálné Kovács, I. 2002*).

The new institutional system of regional development

In relation to the decentralisation of administration the Regional Development and Physical Planning Act of 1996 brought particularly positive changes. The Act prescribed the establishment of the so-called 'regional development councils', special institutions in the field of development planning and resource allocation in all counties. It also created the opportunity to maintain the micro-regional level development institutions of the settlements and the macro-regional level institutions of the counties. South Transdanubia was a pioneer in regional-level co-operation in the country. It had already established a foundation voluntarily in 1993, before the Act was made law, the members being the county councils and the various economic chambers of Baranya, Somogy, Tolna and Zala counties as well as the Transdanubian Research Institute. As a consequence, this was the first region in the country to elaborate a development concept, the main guidelines and priorities of which determine regional planning up to the present day. This concept, in point of fact, was proposed by the Transdanubian Research Institute.

After 1996 the South Transdanubian Regional Development Council was founded as provided by law and shortly afterwards set up its own executive body, the South Transdanubian Regional Development Agency public non-profit company. The establishment of the regional-level development councils, however, was not obligatory and in the light of recent precedents the readiness to co-operate of the counties appeared to be natural.

The composition of the council followed the partnership model required by the European Union and among the members of the council we find the presidents of the four general county assemblies, mayors delegated by the micro-regional associations, representatives of the chambers, delegates from the county councils of labour and representatives of the central ministries as laid down by the Act. However, regional development councils did not have significant competences – and hardly any development resources – before the 1999 Amendment of the Act. Nevertheless, South Transdanubia applied for and won the PHARE Pilot Region Programme, and so the main actors of the region, with this EU support, had the possibility to learn about application, planning, programming and programme management practice in accordance with EU structural policy regulations. In 1999 the law concerning regional development councils changed – something that had both positive and negative consequences. One thing that can be regarded as positive is that the foundation of regional development councils became compulsory and in this way the regions obtained independent competences together with some decentralised development resources. It was also decided that Zala county would not belong to the South Transdanubian region. On the other hand a negative effect was that the composition of the councils changed; the chambers lost their right of representation in the council and the number of places for the micro-regions was reduced also. As a result, the number of central government representatives in the councils is higher than that of locals.



In the past *Kölesd* had an important role in the life of Tolna county. Today it is a special example for the transformation of villages in Hungary. (Photo by György Mánfai)

Notwithstanding this strengthening (to some extent at least) of administration at regional level, the crucial actors in regional development policy are the county development councils – which were themselves founded upon the partnership principle. County councils accept development plans and requisition the decentralised state development resources through calls for tenders.

Among the actors in regional development the so-called ‘micro-regional associations’ must also be mentioned. These are not simply large beneficiaries of available development resources, they also partake in decision-making since they are represented on county as well as on regional development councils.

The practice of regional and county-level resource allocation was and still is, for the most part, based upon the principles of impartiality and egalitarianism. With regard to the fact that most micro-regions in the region are looked upon as disadvantaged areas and as socially and economically underdeveloped, there is a strong political-ethical pressure to make resources available to all of them. Since a relatively small proportion of development resources are paid into the funds serving real regional development purposes and since those again are divided among the ministry in charge of regional development and the 19 counties, far-reaching development aims simply cannot be subsidised. Genuinely innovative projects that enhance economic competitiveness can also not be initiated since the relatively weak enterprises and fragmented local authorities within the region do not have the required ratio of “own resources” at their disposal. We can, therefore, say that the regional development activities are unable to trigger any resounding changes in the region. In spite of the undeniable efforts invested, the future of the region will continue to be shaped by central government policies (cf. the paper by Cecília Mezei).

Unfortunately, no significant expansion of regional independence or scope can be expected after accession to the EU. As a result of negotiations with the Brussels Commission only one solitary regional programme is incorporated into Hungary’s National Development Plan for the period 2004 to 2006. Consequently, the regions can only take part in managing the regional operative programme in a very indirect way since this is the direct responsibility of central government.

Reform perspectives in regional governance

In spite of the above, there are promising signs that the challenges of EU accession will produce a significant shift in regional decentralisation. The government holding office since 2002 has proclaimed fairly ambitious regional reforms in its programme. The aim is to elect regional rather than county self-governments by 2006. The team of experts commissioned to draw up the reforms has

already elaborated its first proposals, but how much political support a vigorous decentralisation process will actually receive is hard to predict. According to the concept, regional governments will be elected in the seven NUTS 2 regions including South Transdanubia. Their competences and resources would, for the most part, be given at the expense of current central government and ministerial competences and resources. Councils would cease to operate at county level, but the institutions providing county-level services would be maintained by local authority associations. These reforms would also include the establishment of a coherent system of micro-regional associations.

The government indicated that the primary reason for these reforms was to succeed in acquiring adequate EU Structural Funds. These fully authorised, politically legitimate and directly elected regions will, according to expectations, be better able to pursue more efficient regional development policy. It is doubtful, however, whether the establishment of regions is totally justified also in other fields of administration and whether the resulting complex, essentially three-level, intermediate administration system is sustainable and manageable in the long term. It is especially uncertain whether genuine decentralisation can be achieved within the framework of a configuration so completely different from the previous one in what is a traditionally strongly centralised, unitary country – and in such a short time also. It is indisputable, however, that EU accession gives a historic opportunity for a change of this kind.

The South Transdanubian example also shows how strong are the marks that the administration structure and constitutional regulation leave on the actual situation and activities of local participants. Reform of the present, highly fragmented administration system is quite inevitable. At the same time, structural reforms alone are unable to solve all operational problems. Readiness to co-operate as an established cultural feature of the local authorities concerned, the professional background of the officers themselves, the scale of resources available to the local authorities, the opportunities to satisfy regional interests, the development and creativity of civic society and the structure and regional connections of private enterprise are all factors without which a regional structure lacks power. The South Transdanubian initiatives will, it is to be hoped, coincide with the reform process started from above and assist in forming a strong, creative and cohesive territorial unit.

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LOCAL ADMINISTRATION AND ASSOCIATIONS

Edit Somlyódyné Pfeil

The organisational system of local administration

The Hungarian Republic is a unitary state, whose territory is divided into a capital city, counties, towns and villages. The Local Self-government Act enacted in 1990 by Parliament followed the recommendations of the European Charter of Local Self-government and created a two-level local authority system in Hungary. Under the Act settlements (villages and towns) and counties are vested with local governmental rights and obligations. The local authority system was, in fact, introduced without territorial reform being undertaken and so legislation followed the 'one settlement – one local authority' principle at the time of the systemic change. Before 1990 the majority of the settlements of village status were forced to form themselves into district-based common administrative, the so-called "district councils", something which effectively deprived them of their independence. A regional policy and financing system was built upon this district-based administration system but this explicitly developed the central settlements of these districts and the towns, generally to the detriment of the other settlements.

Nationally the number of primary administration units doubled when local authorities gained their independence at the time of the systemic change. The process was completed when the villages were established as new administrative units, generally following the disintegration of these forced integrations (village with town) of previous decades.

To carry out their administration duties, all local authorities are empowered to set up independent mayoral offices. Hungary's national constitution regulates freedom of association as a basic right of local authorities and one not to be restricted in any way. In the Local Self-government Act there was nothing more

than a recommendation that neighbouring villages with fewer than 1,000 inhabitants might set up a joint administrative body, the office of a district notary with senior executive powers.

The small- and micro-village settlement structure which is so characteristic of the South Transdanubian region necessitates that local authorities should cooperate more intensively than in other regions of the country. The maintenance of a common mayoral office, i.e. the establishment of a district notary office is more typical of this region than of any other in the country, although it differs in scale in the three counties concerned. In Hungary the introduction of district-based administration ended in the mid-1980s as a result of which integrated primary village administration bodies, district councils, were set up more or less over the entire country in the interests of creating a more efficient and professional administration system. The integration process, whilst not affecting the towns in Hungary, displayed many similarities with the territorial reforms carried out during the same period in several countries in Western Europe.

It took a number of years after the systemic change before the government realised that more significant financial motivators were needed to press Hungarian local authorities to establish associations and district notary offices, i.e. to fulfil their duties better through co-operation.

31% of all district notary offices are to be found in the South Transdanubian region, a fact actually reflecting the highest level of inclination to integrate or of an awareness of the necessity of integration of all local authorities in the country. At the turn of the 21st century the integration of primary administration level in the region had reached the level experienced in the socialist era in quantitative terms, although it still fell short in qualitative terms (see *Table 1*). Whilst the average number of inhabitants per district council area used, in the mid-80s, to be between 3,000 and 4,000, the average population figure today within the jurisdiction of district notary offices today does not exceed 2,000.

The map detailing local authorities is also interspersed with associations of local authorities (see on pages 30, 112, 114). However, the majority of these settlement associations established to carry out these educational, cultural, health-care and social tasks institutionalise the collaborative element of local government in the form of the district-notary office with no more than two settlements within them actually co-operating. Nonetheless in the region the ratio of the statutory obligations of local government undertaken within such forms of co-operation exceeds the national average (see *Table 3*). If we compare the western and eastern parts of the country, we see that, while 30 to 40% of local authorities in the Great Plain do not participate in such public service associations, the settlements in South Transdanubia usually belong to several such co-operations (Somlódyné Pfeil, E. 2003).

Table 1

The proportion of district councils and district notary offices in the counties of the South Transdanubian region (1987, 2000)

County	No. of district notary offices compared to the no. of district councils (%)	Partner villages of district councils as a % of the no. of settlements (1987)	Settlements under district notary offices as a % of the no. of settlements (2000)	Average no. of settlements per district notary office (2000)
Baranya	118.2	94.6	84.7	3.3
Somogy	105.2	95.8	68.9	2.8
Tolna	95.7	65.1	44.4	2.2
Total	109.5	90.0	72.1	2.9

Source: Somlyódy Péter, E. (2003) p. 149.

Table 2a

The distribution of district notary offices by number of member local governments in the South Transdanubian region, 2001

By no. of members (local authorities)	2	3	4	5	6	7	Total
Total district notary offices	88	37	30	10	4	2	171
By % of all district notary offices	51.4	21.5	17.4	5.7	2.3	1.7	-

Table 2b

The distribution of district notary offices by the number of population in the South Transdanubian region, 2001

By size of population	<499	500-999	1000-1999	2000-2999	3000-4999	5000-9999	10 000-
Total district notary offices	3	30	93	23	14	5	3
By % of all district notary offices	1.8	17.6	54.4	13.4	8.1	2.9	1.8

Source: Szigeti, E. (2002) pp. 100-101.

Table 3

An overview of associations in the counties of the South Transdanubian region, 2000

County	Number of associations	Number of settlements	Number of associated local authorities	Associating local authorities as a percentage of all settlements
Baranya	107	301	244	81
Somogy	248	244	244	100
Tolna	54	108	86	80
Total	409	653	574	

Source: Ministry of Internal Affairs.

The situation, however, differs in respect of the maintenance of the main utility services within the settlement structure. In Hungary the population is mostly supplied with electricity and gas by large service providers operating regionally and owned by the private sector. In these fields local authorities essentially have no opportunity to exert influence through their (negligible) shareholding. In the domain of water supply and sewage services, piped water is supplied and sewage services provided in the major towns and cities and in most of the county towns by privatised service companies. In the rural areas, on the other hand, such public services are typically the responsibility of local government; and organisations founded and managed by co-operating local authorities must carry out these community tasks. Currently the organisation of waste collection and treatment is being restructured in the South Transdanubian region and, according to the plans, three large waste management systems in community (local authority) ownership will be established from resources obtained from the European Union.

To date Hungary has not created any legal institutions especially to handle the specific problems of either the cities and their peripheries or the agglomerations. One of the characteristic features of the existing local authority system is that the level of co-operation between village and town authorities is very low. No common planning activity embracing the whole urban agglomerations can be reported in South Transdanubia, but it should be mentioned that the county town of Somogy, Kaposvár, is linked with the surrounding local authorities by means of what is probably a unique, extended network of connections. This principally comprises the organisation of what we may term the "human" public services, the carrying out of administrative duties and also methodological assistance related to these on the part of the city.

The micro-regional level of regional development

Statistical micro-regions

In 1994 the Hungarian Central Statistical Office decided upon the so-called statistical micro-regions (regarded as NUTS 4 territorial units) and these to date form the reference framework of statistical data collection. Their attributes include work-force attraction, transport and secondary education connections, and on this basis we can currently list 150 statistical micro-regions in Hungary. Of these statistical micro-regions, which have an average population of 51,000, 22 are situated in South Transdanubia (see *Table 4*). This figure is not definitive since a revision of these spatial units is in progress and their number is likely to increase by four. In Baranya and Somogy two new micro-regions will be created through separation from the Pécs and Kaposvár micro-regions, i.e. the statistical districts of the county towns will shrink.

Micro-regional associations

Since the systemic change most representative area of collaboration between settlements has been what is termed micro-regional co-operation. Those local governments willing to do something for the development and the improvement of their own region set up their regional development organisations through initiatives coming from below and hand-in-hand with local society. One of the explanations for the birth of these organisations is specifically the fragmented and small-scale nature of the local government system which, owing to the predominance of central financing, possesses hardly any development resources of its own. The other explanation lies in the weakness of the regional development functions of the intermediate level of administration – that of the county assemblies. These regional development organisations were institutionalised by the Regional Development Act, which took effect in 1996 as micro-regional development associations. The only restrictive provision of the regulations relating to these organisations is that their members can only be local governments. The Act grants them rights of representation in the regional and county development councils and makes it possible to elaborate development concepts and programmes for their administrative areas.

Table 4

An overview of statistical micro-regions in the
South Transdanubian region, 2001

County micro-regions	Number of settlements	Population	Proportion of urban population (%)	Unemployment rate (%)	Income (as basis for income tax/ per permanent inhabitant/ Ft
<i>Baranya</i>					
Komló	19	42,369	64.8	7.7	300,725
Mohács	47	53,140	42.9	6.5	311,062
Pécs	69	205,392	81.3	4.1	430,760
Pécsvárad	13	11,139	36.8	4.4	312,417
Sásd	27	15,565	22.9	11.6	234,083
Sellye	30	13,730	23.7	18.8	219,002
Siklós	50	36,674	45.5	8.7	271,841
Szigetvár	46	28,321	40.6	12.3	251,096
<i>Total</i>	<i>301</i>	<i>406,330</i>	<i>63.1</i>	<i>6.6</i>	<i>355,922</i>
<i>Somogy</i>					
Barcs	26	26,873	45.9	12.0	265,809
Csurgó	17	18,973	30.5	8.7	253,250
Fonyód	15	28,224	58.0	6.7	318,921
Kaposvár	77	124,293	54.9	5.7	371,104
Lengyeltóti	10	11,932	28.9	12.4	225,527
Marcali	33	32,200	39.1	7.6	266,630
Nagyatád	18	28,615	42.2	10.7	279,019
Siófok	23	48,991	52.2	6.7	367,811
Tab	25	16,698	29.4	10.1	305,195
<i>Total</i>	<i>244</i>	<i>336,799</i>	<i>47.9</i>	<i>7.6</i>	<i>324,879</i>
<i>Tolna</i>					
Bonyhád	21	30,585	47.1	5.7	337,249
Dombóvár	16	35,711	59.0	7.2	326,953
Paks	14	50,587	59.6	5.4	457,453
Szekszárd	26	90,197	61.0	6.5	402,385
Tamási	31	43,257	33.4	9.6	263,084
<i>Total</i>	<i>108</i>	<i>250,337</i>	<i>54.0</i>	<i>6.8</i>	<i>370,607</i>

Source: Regional Statistical Yearbook, 2001.

In South Transdanubia, and in line with this legal framework, a total of 39 micro-regional development local authority associations – all initiated from below – are active in the 22 statistical micro-regions. Micro-regional initiatives have been developed covering almost the whole of the territory and municipalities not partaking in any kind of co-operation are rare. The relationship between these voluntarily founded regional development associations and the statistical micro-regions show differences across the three counties of the re-

gion. In Tolna county the micro-regional associations were created to coincide with the borders of the statistical districts whilst in Somogy county the borders of these two types of micro-region also coincide in eight of the nine statistical micro-regions. It is only the administrative area of the relatively huge county town micro-region that is fragmented by no fewer than five micro-regional regional development associations initiated from below. However, the picture is most varied in Baranya county where 15 micro-regional development associations fall within the 8 statistical micro-regions. Four of these eight micro-regions (Koml6, Mohács, Sásd and Szigetvár) have a regional development organisation covering the whole of the statistical district, whilst in the other districts the organisational structure is more widely spread. The most problematic micro-region is clearly that of the county town Pécs in which four organisations are active – often overlapping with each other – and without any involvement with the county town.



Csurgó, the city has historic traditions and high international reputation of education. (Photo by György Mánfai)

Administration reform concepts concerning micro-regions

The current central government has in its programme the reform of certain state functions and one of the areas in question is the creation of regional self-government whilst another is the establishment of a micro-regional administration system. An integrated micro-regional administration ensuring the efficiency and professionalism of the whole operation would be realised within the framework of the planned 170–180 statistical micro-regions. This system would, on the one hand, not create a new administration level, and on the other hand it would not affect local authority independence. The micro-regional administration system would integrate three functions: the public service activities of the local authorities, micro-regional publicadministrative responsibilities and also the micro-regions' regional development functions.

To date it has not been decided whether micro-regions will be empowered to fulfil primary or secondary local authority duties. There is also a debate in relation to the means of execution, that is to say, whether the local governments of the statistical micro-regions would establish the complex micro-regional association voluntarily or whether an organisation for micro-regional administration would be created by law, membership of which would be obligatory. The clear rationale for micro-regional administration can be seen when we consider the immense size of regions – far removed from that of the small village – and system should become meaningful with the correlation of the two territorial units.

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THE ORGANISATIONAL SYSTEM OF STATE ADMINISTRATION

István Finta

The historical background of the current deconcentrated organisations

In the period before the systemic change state administration organisations showed a much less variegated picture – not only in South Transdanubia but also nationwide – than it does today. In those days the main participants in the territorial sector of state administration were the counties and their position went unchallenged even during the very stringent pursuit of centralisation in the 1950s. In relation specifically to the local state administration system, frequent significant changes evidenced the very limited scope of influence actually available to local interests. These changes were introduced in the form of periodical amendments to the law in relation to councils, and of these changes the reform of 1984 reform can be regarded as the most significant, coming a relatively short time prior to the systemic change. This particular reform totally recast territorial administration in South Transdanubia and the entire country by eliminating the “district” level of government which had emerged between the “county” and “local” levels – together with the associated district offices. “70% of the matters handled, at least initially, by these district offices were redirected to the villages and 30% to the towns.” (*Hajdú, Z. 1987. p. 104.*)

After the systemic change measures concerning reorganisation and relating to regional administration were largely directed against county councils, and these councils, which up to that point had existed (under party direction) as bodies responsible for allocating funds and for supervisory inspection, were also abolished in the sense that the county self-government which replaced them were no longer given state administration functions. In order to fill the

ensuing vacuum in the field of territorial administration, large numbers of organs created from above and fundamentally overseen by central government were established. It was in this context that one of the first regional-level state administration organisations following the systemic change, – the office of what we might term “Prefect of the Republic – could be created. In the case of South Transdanubia the scope limits of the authority of this office coincided with the present borders of the region. The most important responsibility assumed by the office was the supervision of local governments from the point of view of their compliance with the law, but following bitter political debate the office was abolished after the change of government in 1994. Its functions were taken over by administrative offices already organised at county level.

Typology of the regional state administration organs

In the course of democratic transformation the reorganisation of state administration, perhaps rather less democratic or at least largely ignoring social participation, resulted in the establishment of a number of deconcentrated organs in South Transdanubia – as elsewhere. The county could already be recognised as the most important unit in the spatial system of state administration, but there were invariably other organisations also which embraced an even larger territory, a region or several counties. No explicitly region-specific, state administration organisational system has been created, nor one which is characteristic of South Transdanubia alone. This is not surprising, since in the conduct of public affairs normal, law-abiding citizens cannot justifiably be subject to special legal provisions nor to discrimination, whether positive or negative, purely on the basis of their living in different areas – that is, on the basis of a territorial principle. It would be pointless therefore, to attempt to identify distinguishing features, apart from those described above, in individual regions regarding the numbers or types of state administration institutions. In Hungary the organisational system of territorial administration is so highly developed that there are no substantial differences among the regions even in the number of state administration organs with relatively limited networks. One example, based on data from January 1st, 2001, concerns the number of labour agencies under the direction of the county labour offices. The relevant figures show 24 in Central Hungary, 24 in Central Transdanubia, 19 in West Transdanubia, 21 in South Transdanubia, 27 in Northern Hungary, 32 in the Northern Great Plain and 25 in the Southern Great Plain (*Szigeti, E.* 2001. p. 240.). This homogeneity can also be attributed to those principles of administrative organisation, which decide the number of state administration organs within a given territorial unit based upon the numbers of matters to be handled and of potential clients.

If we examine the number of these organs operating in the larger towns and cities of the individual regions, we can see that in the category of 40–42 organisations there are three such cities in each of the Transdanubian (Central, South and West) regions as well as in the Northern Great Plain; there are four in Northern Hungary but five cities with institutional networks of this scale in the Southern Great Plain (*Szigeti, E. 2001. p. 249.*).



*Pécsvárad is a historic town with beautiful natural landscape around.
The city had an important role in the early history of Hungary.
(Photo by László Körtvélyesi)*

The above data appear to verify the assertion that the territorial-level establishment of state administration has produced such a homogeneous institutional system on a national level that it is scarcely capable of taking into account the differences and peculiarities at regional level. At the same time, the creation of a number of special state administration organs dealing with the South Transdanubian region was justified by certain principles of administration organisation. These particular organs fulfil special duties related to specific features of the region and to special activities pursued in the region. The South Transdanubian Water Conservancy Directorate and the Danube-Dráva National Park Directorate were founded in order to preserve natural values and to protect and manage nature. Within the framework of the National Agricultural

Qualification Institute a plant species experimental station and a seed inspectorate are also operating, closely related to the special agricultural activity pursued in the region. The district mining inspectorates and telecommunication inspectorates were organised on a similar basis. These do not have independent headquarters in all statistical regions, however, but in the South Transdanubian region, in view of the region's special heritage, it was deemed necessary to endow them with overall regional competence.

The remaining regional organs of state administration are also found in other areas and regions of the country and so South Transdanubia has no distinguishing features in relation to these. However, our picture of the state administration structure of the region would be somewhat incomplete if we did not refer to these organisations at all.

The number and the selection of South Transdanubia's state administration organs to be set within the regional framework was presumably influenced by principles of administration organisational such as the number of cases involved, the provision of adequate access for clients and an attempt to bring newly emerging matters rapidly to the forefront and to deal with them expeditiously. In the case of organisations whose duties did not primarily consist of satisfying private demand (for example, the forestry service) and in those cases where the relatively limited range of affairs was a more important principle (from the point of view of cost efficiency) than providing administration on the spot, organisations with broader, overall regional competence were established.

Certain organisations occupy an intermediate position between regional and county level since their competence does not cover the current planning and statistical region of the three counties, but only two of them. A case in point is the agency of the Central Compensation Assessment Office, an organisation based in Pécs and competent in the counties of Baranya and Somogy. It should, of course, be added that this office clearly used to be very much more active after the systemic change. The Pécs Directorate of the National Forestry Service is in a similar situation since its authority extends only to Baranya and Tolna counties. (The Kaposvár Directorate constitutes an independent unit for Somogy.)

Some organisations are relatively fragmented organisations that not only have a network of county or regional competence, but also organisational units (headquarters, agencies and so on) which for the most part follow the pattern of urban agglomerations within the counties. The establishment of territorial units at a level lower than that of the county can also be related to those administration organisational principles outlined above and which attempted to decide the territorial competence and division of a given organisation based on the number of matters to be handled and also upon the principle of deciding matters as rapidly as possible (*Table 1*).

Table 1

Deconcentrated state organs in South Transdanubia

Organisation	Geographic scale			Government control
	Region	County	Micro-region	
County police offices		X	X	Ministry of Internal Affairs
County public administration offices		X		
County defence committees		X		
County directorates of the National Disaster Recovery Directorate		X		
South Transdanubian Regional Directorate of the Immigration and Nationality Office of the Ministry of Internal Affairs	X			
South Transdanubian Regional Chief Architect's Office	X			
Fire brigade headquarters		X	X	
Neighbourhood watch headquarters		X	X	
Institutes of the National Health Care Authority		X	X	Ministry of Public Health, Social and Family Affairs
Public area patrols		X	X	
Health & Safety at work inspectorates (within the labour offices)		X		
Land Registry		X	X	Ministry of Agriculture and Rural Development
County fishing and hunting inspectorates (within the agriculture offices)		X		
County phyto-pathology and soil protection stations		X		
County veterinary hygiene and food-stuffs inspection stations		X		
County inspectorates of Transport Authority		X		Ministry of Economy and Transport
Regional inspectorates of the Consumer Protection Authority (within county administration offices)		X		
Pécs District Mining Inspectorate of the Hungarian Mining Office	X	X		
South Transdanubian Regional Office of the Hungarian Geological Service	X			
Regional Technological-Safety Inspectorate	X			
Office of Weights and Measures of the National Measurements Office	X			

Organisation	Geographic scale			Government control
	Region	County	Micro-region	
Labour offices and agencies		X	X	Ministry of Employment Policy and Labour
Regional Telecommunications Inspectorates	X			Ministry of Telecommunication and Information Technology
County replacement depots		X		Ministry of Defence
Danube-Dráva National Park Directorate	X			Ministry of Environmental Protection and Water Conservancy
South Transdanubian Environmental Protection Inspectorate	X			
Pécs Regional Office of the Cultural Heritage Directorate	X			Ministry of National Cultural Heritage
Regional monument construction inspection and client service offices of the Monument Inspection Directorate of the National Monument Protection Office	X			
County public finance offices		X		Ministry of Finance
County directorates of the Taxation and Financial Inspection Office		X		
Customs offices	X		X	
Pécs Directorate of the National Forestry Service	X			Ministry of Agriculture and Rural Development
Central Compensation Assessment Office	X			
County Directorate of the National Health Insurance Service		X		Government
County directorates of the National Pension Funds Chief Inspectorate		X		
County directorates of the Central Statistical Office		X		

Source: Szigeti, E. 2001; different numbers of "Magyar Közlöny".

Attempts to reform state administration

Over the dozen years or more since the systemic change several governments and several government resolutions expressed the need for the modernisation of state administration.

In the first parliamentary period Government Decree 1026/1992 (05–12) on the Modernisation of Public Administration emphasised the division of labour between the ministries and the various nationally competent organs, the typology of these organs, the clarification of their legal status and their place in administration.



Szekszárd, the city, known as the city of grapes and wines, lives in a good harmony with its environment. (Photo by György Mánfai)

The 2003/1995 (01–20) Government Decree targeted the elaboration of a proposal referring to the overall reform of a deconcentrated organisational system in the programme of a government commissioner appointed specifically to modernise the administration. According to the Decree issued in 1996 the possibility of setting regional state administration on a regional footing was to be examined. Also, again according to the Decree, there was a clear intention to organise these administrative organs regionally, at a level superior to the county – the secondary authority after the local authority town-notary of the

settlement centre as the district centre, the primary authority. No administration re-organisational measures of this type have so far been taken; and indeed their grounds may not even be justified in all cases. On the other hand, the effort to co-ordinate and control the activity of the leaders of the county administration offices and the deconcentrated organs operating in the region and based upon specific legal provisions must be approved.

The administration reform conception in 1997–1998 only states that the revision of the scope of duties and competences of the territorial organs of state administration must be continued. At the same time there has still been no significant change in the number or in the competence of the deconcentrated organisations.

The government programme for the further development of administration over the period 2001–2002 restates the development plans referring to the regional level also adds that in the case of state administration responsibilities it is reasonable to attempt to delegate them to the level closest to the clients (i.e. to regional or local administration organs) or to local authority town-notary etc.

The various and (in respect of their targets) genuinely ambitious government resolutions detailed were able to effect little or no changes with regard to deconcentrated organisations. The territorial modernisation of public administration appears to be more difficult than the establishment of the (well-functioning) regional level of regional development.

Summarising the Hungarian territorial state administration, it shows a quite fragmented, caotic picture. Its coordination would be principally the duty of county public administration offices but without success. The shaping reform of territorial administration would provide a good opportunity for consolidating the order of territorial state administration as well.

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Regional Action Plan of South Transdanubia

The document was prepared by the Regional Development Agency of South Transdanubia and was accepted by the Regional Development Council of South Transdanubia, 2003. August 29, as a framework for the next activity.

I A SWOT analysis for South Transdanubia

Strengths

– *Favourable agro-ecological potential*

Due to its favourable climate and soil conditions the average crop-yield surpasses the national average and that of other regions: in the year 2001, for example, the average wheat yield was 116.7% of the national average. Tolna and East Baranya have the best crop yield conditions. The competitiveness of agriculture is based on university education and well-trained human resources in agriculture and the food industry are also available in the region.

– *Quality viticulture and viniculture*

Viticulture and viniculture are extremely important to the region. Five of Hungary's total of twenty-two wine regions are located here (South Balaton, Pécs, Villány, Tolna and Szekszárd). The region's share of the total wine production is 13.6% and a significant quantity of this is exported.

– *A high level of afforestation with an abundance of game*

South Transdanubia's level of afforestation is higher than the national average and there is an abundance of game of various species (Zselic, Gemenc).

– *Competitive food industry*

The region has long-standing traditions in the food industry with numerous well-known, old companies (e.g., in the sugar industry in Kaposvár, in meat processing in Pécs and Kaposvár, in the canning industry in Szigetvár and Nagyatád, in the beverages industry in Siófok and in the milk industry in Pécs, Barcs and Szekszárd).

– *An abundance of medicinal and thermal waters*

The region has 16 medicinal and thermal spas, six of which 6 have an international reputation and importance.

– *A role for tourism above the national average*

In 2001 South Transdanubia was the destination of 12.6% of all Hungarian tourist traffic and 20% of the total of hotel reservations was realised in the region. The average length of time spent by tourists here is 30% higher than the national average.

- *The fame of Lake Balaton as a tourist destination*
- *A rich cultural and historical heritage and a broad natural dimension and landscape*

The region is rich in historical monuments and natural values. It has 2 national parks and also World Cultural Heritage sites.

- *The presence of a river (the Danube) suitable for international transport*
The river as a part of the VII Pan-European corridor connects the region with the Black Sea and the North Sea.
- *A wide variety of ethnic groups with active relations with mother countries*
- *A large proportion of foreign language speakers*
More than 20% of the population can speak foreign languages (German, English, Russian, Croatian etc). This is significantly higher than the national average.
- *Advanced higher education*
The region has 2 universities. The University of Pécs is one of the largest higher education institutions located outside Budapest.
- *A scientific basis for generating competitive research results*
The network of university research units can initiate competitive research activities.

Weaknesses

- *Low added-value performance of agriculture*
Agriculture had only 8.6% of the region's total added-value production in 2001. The economic and production structures are very unfavourable due to the fragmented land-ownership system. The proportion of the labour-force working in agricultural (10%) is almost double the national average, which is one of the major reasons for the region's low population-retaining capability and the high rate of outward migration
- *A high proportion of depressed micro-regions*
66% of the region's total area, holding 48.84% of the total population, consists of depressed micro-regions (the Tamási, Paks, Dombóvár, Bonyhád, Tab, Fonyód, Lengyeltóti, Marcali, Csurgó, Nagyatád, Barcs, Szigetvár, Sellye, Siklós, Mohács, Komló and Sásd micro-regions).

- *The underdeveloped settlement structure: few medium and larger towns to serve as economic centres; large areas functioning without urban centres*

The region's urbanisation level is far below the national average: this is true even in Baranya county which has the highest degree of urbanisation. More than half of the population of Somogy county lives outside towns.

- *Heavy environmental damage and scarred landscape as a consequence of earlier mining and heavy industry*

- *The seasonal and spatially concentrated character of tourism*

Tourism is concentrated on the southern shore of Lake Balaton and for the summer period only.

- *A shortage of top-quality accommodation*

Hotels comprise 30.6% of the total of paying accommodation services in the region and this is below the national average (2001). There is almost a complete absence of top-category hotels in the region.

- *An underdeveloped transport network, with poor outer and inner accessibility*

The absence of highways and by-passes, the poor quality of the (incomplete) minor road system, an extremely large number of dead-end settlements, a poor and incomplete railway system, the low number of bridges over the Danube and Dráva and the low number, capacity and poor servicing of border-crossings. Connections between county-towns is inadequate due to the underdevelopment and incomplete operation of transportation networks. The situation is extremely critical in the case of the Kaposvár–Szekszárd connection.

- *Poor public transport facilities*

The organisation of public transport is poor and in some cases different services run in parallel (e.g., railway and bus). In several places, due to the spatial system oriented towards small settlements, primary only services are available, in this way decreasing population mobility. In the larger towns and cities both increasing traffic and local transport development policy neglect the interests of public transport and so decrease the attraction of public transport.

- *The low level of economic activity*

The region's activity rate is 51.2%, which is below the national average (53.2%) (Q1, 2003) and also far below the EU average (63%, 2000).

- *An above average unemployment rate*

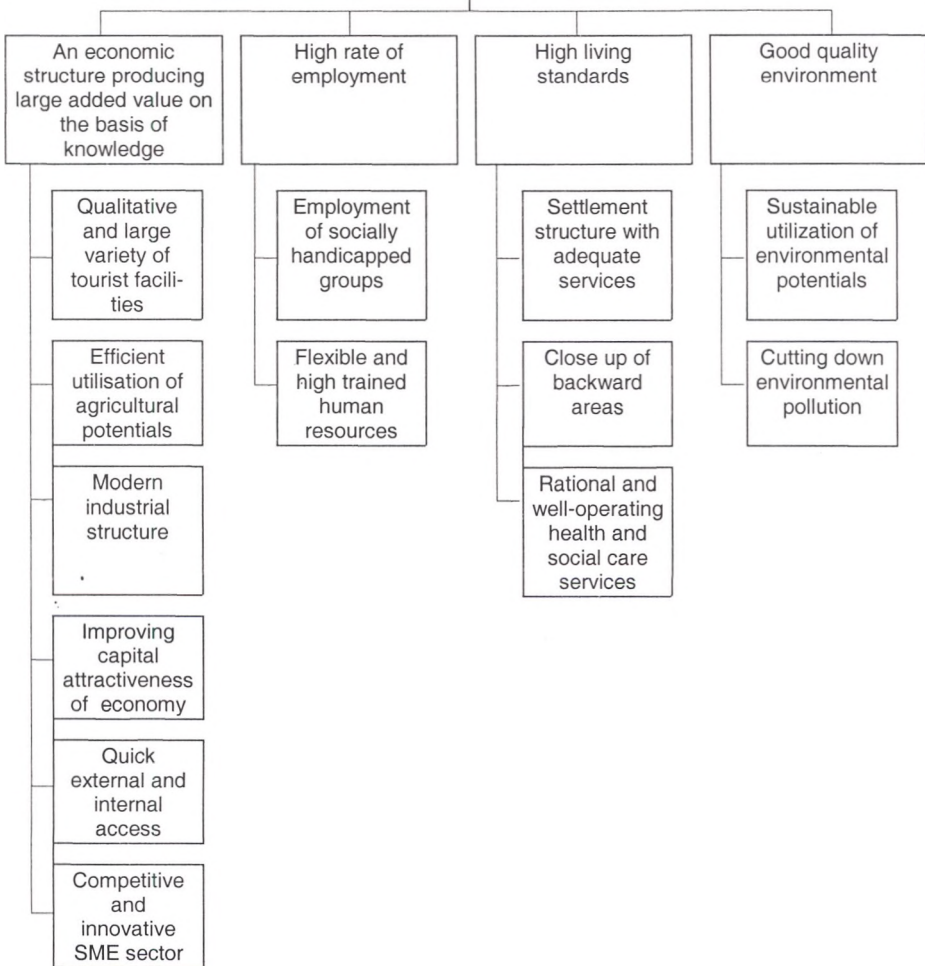
The unemployment rate is 8.5%, which is 2% higher than the national average (6.4% in Q1, 2003).

- *The low market-orientation of secondary and higher education*
- *The complex problems of the Roma and handicapped social groups (social, socio-economic problems)*
- *The ageing population and short life expectancy*
20.7% of the region's total population is over 60 and the ageing index is 94.3. Both values are higher than the national average.
- *A shortage of jobs for both the lowly and highly trained workforce*
- *The low capital resources of SMEs*
- *A high proportion of self-employed, low income earners*
- *The low volume of industrial exports*
Export sales as a proportion of industrial sales is 49.1%, which is below the national average (55.8% in (2001)).
- *The low level of foreign direct investment*
The region received only 1.8% of the foreign direct investment which was directed to Hungary in 2001.
- *The small number of large companies*
The number of companies in the region operating with a staff of over 250 is 83. This is only 7.7% of Hungary's total number of large companies. (2001).
- *The absence of innovative medium-sized enterprises*
- *The underdeveloped business service sector*
- *Underdeveloped computer networks*
- *Transport-generated high noise levels and air pollution*
- *The current level of sewage facilities is inadequate both from quantitative and qualitative points of view*
The proportion of households connected to public sewage systems in the region is 49.5%, which is below the national average (53.5%). The availability of public sewage is far below that of piped drinking water. The ratio of sewage pipe per kilometre of drinking-water pipe (298.1 metres) is far below the national average (434.9 metres in 2001).
- *Inappropriately sited waste deposits are serious threats for drinking water resources*
- *The absence or weakness of local communities and initiatives fails to mobilise internal development potential.*
- *There are disparities in the spatial distribution of general practitioner and ambulance services*

Options	Threats
<ul style="list-style-type: none"> • <i>An increasing trend towards cultural, medical, wellness, eco-, wine and gastronomic tourism</i> • <i>An increased volume of EU funds for the development of railways and public transport</i> • <i>The intensification of cross-border and international co-operation</i> • <i>The intensification of economic relations with the stabilising Balkan region</i> • <i>The increasing role of the southern border as it becomes a Schengen border</i> • <i>The utilisation of the potential of co-operation between enterprises</i> • <i>facilitation of networked co-operation between public and private sectors</i> • <i>Development of environmental and health industries</i> • <i>Increasing the role of civil sector initiatives within the mobilisation of local resources</i> 	<ul style="list-style-type: none"> • <i>The low level of capital resources within the agricultural sector</i> • <i>The continuation of unfavourable demographic tendencies</i> • <i>The region's peripheral situation is becoming fixed. International transit traffic is directed into different countries or regions. Foreign direct investment avoids the region, capital centres will be established outside the region; the internal periphery will increase in size.</i> • <i>Outward migration from the inner small settlements of the region's external and internal periphery</i> • <i>Outward migration of highly trained workforce (brain drain)</i> • <i>Termination of environmental regeneration programmes</i> • <i>Termination of the environmental and transport infrastructure development programmes.</i> <p>The building of logistics centres will be initiated by other (Hungarian or foreign) regions.</p>

II Strategic objectives for South Transdanubia (2004–2006)

An open, competitive region, successfully utilising its inner potential and becoming, for the welfare of its population, capable of dynamic, sustainable and spatially harmonised economic development.



The Mission of South Transdanubia is defined as follows: *'An open, competitive region, successfully utilising its inner potential and becoming, for the welfare of its population, capable of dynamic, sustainable and spatially harmonised economic development'*.

To achieve the targets of the mission four strategic objectives are formulated as follows:

1. *An economic structure producing greater added value on the basis of knowledge*

To create a region of dynamic, sustainable economic development it is necessary to establish a stable and well-operating economic environment. After the systemic change the region's economy went through a deep and fundamental restructuring process, but this restructuring was not favourable for the region. It took place without creating companies with modern technology – on the one hand, to act as a mediator for modern entrepreneurial and manufacturing skills for local SMEs and, on the other hand, serving as a market for them. After the shocks of restructuring, a spontaneous regeneration process started. Today our region has only a small number of large companies and its medium-sized enterprises are also weak. The region's accessibility is poor and its infrastructure is underdeveloped, badly needing modernisation to achieve the objectives set.

The specific tasks in this field are as follows:

- The efficient utilisation of agricultural potential
- To create a modern industrial structure
- A wide variety of high quality tourist facilities
- Rapid external and internal access
- A competitive and innovative SME sector
- The improving capital attractiveness of the economy

2. *A high rate of employment*

The achievement of high rate of employment is closely related to the previous strategic objective. Today the region has low activity and a high unemployment rate. The population has an average educational background; the educational systems is good but the market orientation of secondary and higher education

is low and a deterioration in the relative level of socially handicapped groups is increasing.

The specific tasks in this field are as follows:

- To create a flexible and well-trained human resource base
- The employment of socially handicapped groups

3. High living standards

To increase living standards it is necessary to provide an optimal living environment and to improve standards of living. The region has two large cities, some small and medium-sized towns and a small village-based settlement structure. In this latter environment the access to primary business and public services is more difficult for the locals, and the few towns and medium-sized cities can hardly perform their spatial economy organisation functions.

The specific tasks in this field are as follows:

- To establish a settlement structure with adequate services
- To ensure that backward areas catch up.
- To establish rational and efficient health and social care services

Quality of environment

Good living conditions largely depend on the state of the environment. The environment was heavily polluted in past decades (due to mining and other industrial activity) and pollution was further increased by communal waste. A continuous monitoring and improvement of the state of the environment are essential to achieve sustainable development.

The specific tasks in this field are as follows:

- To reduce environmental pollution
- The sustainable utilisation of environmental potentials

III The definition of the key issues of development

The Development Strategy of South Transdanubia (2004–2006) defines the key issues of development as follows:

Priority 1: Increasing the intensity of economic activity

For the further diversification of the economy it is necessary to attract ventures *using advanced technology* into the region. This requires the *development of enterprises and technology innovation support facilities* (industrial parks, incubator houses and the development of logistics centres). *Economic co-operation among enterprises, networking and the co-operation of industrial parks* should be encouraged. Industrial parks have been established in the following towns: Pécs, Komló, Bóly, Mohács, Siklós, Sellye, Kaposvár, Siófok, Marcali, Csurgó, Barcs, Nagyatád, Szekszárd, Paks, Simontornya and Dombóvár.

The professional competence and technology of small-scale production and services should be improved and *quality assurance systems* should be established. In university cities (Pécs and Kaposvár) *existing or start-up enterprises* should be supported in the fields of *innovative communications, information- and bio-technology, environmental and health industries and industrial design* on the basis of locally accumulated technical, natural science, artistic and cultural resources. *Content-provider services facilitating the development of the information society* should be improved throughout the whole region, which will significantly contribute to the region's overall economic development.

The region faces unemployment higher than the national average in its micro-regions (Tamási, Paks, Dombóvár, Bonyhád, Szekszárd, Kaposvár, Siófok, Tab, Fonyód, Lengyeltóti, Marcali, Csurgó, Nagyatád, Barcs, Szigetvár, Sellye, Siklós, Mohács, Komló and Sásd). *Enterprises creating good numbers of new jobs* should be encouraged and *industrial plants* located in former centres of heavy industry ("rust-belt" zones) should be rehabilitated in order to attract modern industrial activities. For a wider promotion of the region's business activities *investment stimulation activities* should be encouraged.

The number of jobs in agriculture significantly exceeds the national average. On the basis of the region's outstanding agricultural potential the volume of local agricultural income needs to be increased. A **rational economic structure** may be achieved through *the increase of processed agricultural products and the encouragement of vertical and horizontal integrations and co-operation systems*. Maintaining

competitiveness and the further development of the region's large, capital-based food processing plants is a priority objective.

In the peripheral areas of South Transdanubia (Ormánság, Külső-Somogy, Baranya-Hegyhát) more attention should be paid to the application of rural development instruments. To improve the income potential of rural areas the diversification of economic activities is a absolutely vital.

Fast and easy accessibility within the region requires *improvements to connections between county towns*. A city/outer-ring system of first- and second-class main roads should be built and, mainly in Baranya and Somogy counties, *the missing connecting roads of important to the networks should also be built*. The peripheral character of dead-end settlements should be terminated, especially in places where this situation significantly decreases the accessibility to spatial centres and public services. *Public transport development should be carried out through the intensification of co-operation among providers and through infrastructure investments improving the competitiveness of public transport in large towns and cities*. These investments would provide easier and safer connections to economic centres for all the settlements of the region.

Priority 2: Improving the income potential of tourism

Although the region's potential in tourism is excellent, apart from Lake Balaton, tourism is significant only in the micro-regions of Pécs, Pécsvárad and Harkány. Significant investment is needed into the tourist infrastructure attached to these areas and also into *medicinal and thermal spas, the Danube-Dráva National Park, nature conservation areas* (water- and ecological tourism, cycling and horse riding) and into the *wine districts* of Szekszárd, Tolna and the Mecsek.

The quality of services offered by tourism-oriented business should be improved - mainly in the above-mentioned tourist areas. The development of tourist attractions thematically built on the region's special natural values (wine, water, eco-, green- and village-tourism) with *cultural and vacation programmes* should be encouraged. These programmes will add more colour to local cultural life. Regional *tourism promotional activities* and efficient *marketing strategies* will contribute to the realisation of the region's objectives.

Development projects increasing the region's importance in the field of *professional and spa tourism* are of extreme importance. *New conference centres and first-category hotels* should be built in the county towns, whilst in places with medicinal waters the development of *medical, thermal and wellness centres* is a necessity.

Priority 3: Improving human resource potential

For the improvement of the region's employment situation and economic activity the maintenance and improvement of its human resource potential are necessary. To achieve this, *the extension of the existing training and higher education profile and of the research potential - and their adaptation to the current market and labour market demands - are needed.* With the involvement of players actually in the market, *the practical orientation of higher education should be encouraged by the opening of new departments and by the launching of new training programmes (e.g., in higher education in applied technology, in informatics, regional and settlement development and in industrial design).*

Partly on the basis of existing scientific centres and partly on the basis of new or market-oriented science parks *the intensity of basic and applied research should be increased* and greater practical utilisation of research results should be targeted. By strengthening interaction between the university and the market sector, a higher level of market conformity should be achieved. The role of *university knowledge centres* would be very important in this respect by continuously improving interactive relations between the university and the entrepreneurial sector and also by providing training and research facilities tailored to company needs.

To meet the labour force demands of existing and new industries, *market conforming professional training and retraining programmes* should be organised which would also harmonise with the labour demands of new enterprises quickly and flexibly. To comply with the trend of lifelong education, modern forms of post-graduate and adult education and of distance learning should be supported.

The development of the infrastructure for an expert and higher education system is essential for the achievement of education- and training-related targets. Within this framework, the renovation of buildings is a necessity and also the capacity and quality of student hostels and the technical facilities of education should be improved.

The start-up of new businesses with the organisation of business training programmes for the unemployed should be encouraged, especially in areas of high unemployment.

Professional orientation services, which currently function only weakly, need to be improved. The outward-migration of qualified expertise should be prevented by creating regional databases, by the preparation of a homogenous

complex training strategy and by the application of an inter-compatible education structure.

Priority 4: The creation of a good quality environment and an improvement in living standards

The general level of waste management is far below Hungarian social demands and the European Union's standards. To improve this *the infrastructure of waste management and the quality of its associated services should be improved*. An improvement to the state of the environment requires that the environmental pollution elimination programmes of the National Environmental Programme should be carried out. *At the local level, the elimination of environmental pollution should be completed* in individual settlements (e.g., the closure of illegal waste dumps).

The problems of waste-water management significantly contribute to the continuous pollution of surface- and ground-water. To eliminate this problem, the extension of the sewage network should be subsidised. In such places where the building and operation of a sewage system would not be profitable, *public utility substitution devices or alternate waste-water management systems should be installed*.

To *reduce air pollution*, the installation of technologies reducing the level of transport-generated pollution and industrial emissions should be encouraged. Of the tasks of surface-water protection, *the protection of the water of Lake Balaton and the reduction of river pollutions by communal and industrial sewage* should have priority. To protect the quality of the ground-water supply, *the accumulation of pollutants should be eliminated*. The protection of drinking water supply areas is vital, especially on the river Danube and in the major part of Baranya county. In several settlements of South Transdanubia the quality of drinking-water does not meet European Union standards and, therefore, the development projects targeted at the protection of the drinking-water supply should be supported at these places according to the principles of the regional drinking-water quality remedial programme.

To achieve sustainable development, *the application of the various sources of renewable energy should be stimulated and supported* such as biomass, solar, wind and geothermal energy. The aims of the *preservation of the state of the environment in protected areas and an ecologically sustainable utilisation of the environment* should be respected.

To protect the built-up environment, *local integrated settlement development action and programmes should be stimulated* and to improve the functional role of cities performing the role of spatial centre but with a weak spatial integration force, *urban services need to be extended by building or improving several economic, cultural, communal-information leisure and sport facilities.*

Supporting *innovative community initiatives* contributes to the sustainability of settlement development programmes and the mobilisation of local community and civic initiatives. Special care should be paid for *the development of the infrastructure of communication technologies and e-government* (tele-cottages, data transfer technologies) that will increase the overall chances of accessing various sources of information and services.

Even in small villages and the peripheral environment, an adequate health-care service should be maintained through *the improvement of the health-care structure and the modernisation of its equipment.*

The integration of socially handicapped groups into society (including the population of handicapped, backward micro-regions) requires the development of the *social economy and the modernisation of the institutional system of civic social care* especially in the internal and external peripheries of the region. *The training, special training, retraining and complex professional training programmes* of the Roma population which is found throughout the entire region but in groups at settlement level, should be supported together with other groups of *marginalised, unemployed and disabled people.*

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