ANALISES OF THE HUNGARIAN POLYCENTRIC SPATIAL DEVELOPMENT GOALS AND ITS ACHIEVEMENTS CONCERNING THE SOUTH-GREAT-PLAIN REGION

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Abstract:

From the 1960s the organization of European Economic Community has been influenced more and more by the regionalism. The importance of the spatial development and the goals of polycentric city network concepts have became more powerful from the beginning of the 1990s.

The process is well featured by ESPD (European Spatial Development Perspective) - which is well known as the basic document of the European spatial policy - and ESPON (European Spatial Planning Observation Network) because its themes emphasize the inportance of the establishment of a well-balanced, polycentric city network system concerning sustainable development and competitiveness.

This paper aims to survey the important milestones of the formation of the European and Hungarian well-balanced, polycentric spatial policy, especially the ones of the polycentric settlement development. Also the realization of the Hungarian well-balanced, polycentric system will be analyzed by the outputs of the regional economic activities, specially in the South-Great-Plain region.

Keywords: balanced spatial development, polycentric town network, development poles, EU supports

1. INTRODUCTION

The 1999 ESDP (European Spatial Development Perspective) regards polycentric regional development as a key factor of balanced spatial development and mainly examines it along the questions of effectiveness [11]. Nevertheless, emphasizing the importance of polycentric town network systems carries justice factors besides the elements of effectiveness (competitiveness): towns with an important role in the network get a lot of attention not only in terms of economic development, but due to their central role, they stand a better chance of applying for those innovations that have little economic development effect, but rather put forward social aspects.

In Hungary the optimal sustainable development of modern times' urbanization was influenced and detained by several historical factors besides the traditional external factors. The several changes in the territory of the country in the first half of the 20th century, after that the shift to the socialist regime hindered the establishment of a polycentric settlement network fundamentally – which, based on today's regional economy criteria, is indispensable for a balanced spatial economic development.

In our study, from the aspect of the intention to develop a polycentric settlement network system, proceeding from the first domestic recognition of the importance of the spatial procedures, we analyse the domestic, functional realization of the European Union's spatial development principles and we examine its efficiency with the example of the South-Great-Plain region and Szeged, mainly through project supports.

2. THE PRINCIPLE OF BALANCED SPATIAL DEVELOPMENT AND POLYCENTRALISATION IN THE DOMESTIC AND THE EUROPEAN UNION'S SPATIAL DEVELOPMENT POLICY

2.1. Historical antecedents: the recognition of spatial procedures and the connections with the town network system's development in Hungary

In connection with the criticism of the Trianon peace-treaty, earl Pál Teleki was the first to examine the spatial procedures' effects on the economy in Hungary in the 1920s [15]. In his opinion the dissolution of royal Hungary's uniform, polycentric town network system and the country becoming Budapest-centred would result in serious economic effects that would be dominant for long



decades. The truth of his recognition can be justified by the fact that the political and economical reactions that could have meant an utter solution to all these negative spatial effects, couldn't be done to this very day. More than 25 years after the end of World War II., and the transaction of the Trianon peace-treaty, only indirect measures were taken to strengthen the towns' economic role and to confirm and restore the towns' functions¹. Thanks to the elaboration of the counties' town network system's concept and to the starting regional planning from the mid-1960s – the time of the New Economic Mechanism – the National Town Network System Development Concept took effect in 1971 and it expanded certain towns' economic and social functions².

Although spatial development was regarded as part of the economic policy by the 1980s, it meant improvement only ideologically, substantive decisions couldn't be made in the whirl of the change of the regime, so the differences between the regions deepened significantly. Due to this, the original aim to establish a town network system that could compensate Budapest couldn't be achieved, but thanks to the development several functions of the towns were boosted (e.g. public transport, education, health care) that could be a base of the settlements' urban roles.

2.2. Supranational spatial development documents: the connection of polycentic spatial development and town development

In the beginning of the 1990s many initiatives were started to reduce spatial differences in the European Community. From these, several ones regard the town development and transport development policy – that are essential in this study – as an important spatial development element. After a decision was made due to some initiatives to let the handling of spatial planning and development on a political level also be a competence of the union politics, the meetings of The

European Union in Corfu and Leipzig in 1994 defined the principles that led to the establishment of ESDP (1999) [28].

ESDP (1999) and the spatial development schedule puts emphasis on balanced regional development. They deal with strengthening partnership between urban and rural regions to a great extent, which contributes to the effort to cease the rural-urban duality. The document defines that the aim of regional development policy to make efforts so that the territory of the European Union proceeds towards a balanced and sustainable development (Figure 1).

On the basis of the offers of the ESDP, the development policy has to be formed according to the requirements of the efficiency, the equitableness and the sustainable development. From the four major parts of the ESDP, part A (more balanced and more-centred town network, new connections between the town and the country) deals with the importance of a polycentric town network making an attempt



Figure 1. Triangle of the European Spatial Development Perspective Source: ESDP (1999)

to develop the spatial balance, including town and traffic development.

On an international level, besides the ESDP, the European Spatial Planning Observation Network (ESPON)³ has to be treated as the basis of spatial planning. The general regional development objectives and principles listed in the ESDP (subsidiarity and decentralization, programming and monitoring, partnership, concentration and additionality, sustainable development, publicity and attendance) are not only found in the document, but the most objectives of the ESPON are organized around them, such as the reduction of the regional differences, the support of a more balanced and more-centred European regional development. The support of the ESDP principals was regarded as an objective – which can already be observed in the Charta of Leipzig and the European Regional Development Timetable [9][10]⁴ – in the 2006 ESPON program of the European Committee accepted on 7th February 2003.

¹ TERINT (1951): The spatial settlement Institute was established under the aegis of the Restoration and Public Work Ministry, that was formed after World War II and it put Hungarian settlements into three categories: 1st category: emphasized settlements, industrial centres, 2nd category: settlements with the assurance of urban development, 3rd category: other settlements [14].

² OTK (1971): At the time of the New Economic Mechanism, the 1007/1971. (III.6) Act, also known as The National Town Network System Development Concept, was passed as a regional economic policy element. One of its fundamental aim was to end the country being Budapest-centered and to establish a uniform spatial structure by developing five economic zones with Győr, Pécs, Debrecen, Miskolc and Szeged in the centres [26].

³ ESPON: the thought of the establishment of the European Spatial Planning Observation Network comes from the idea that after the acceptation of the ESDP, the thought of a common regional planning institute arose. As its establishment was not possible because of financial and other administrative barriers, the network constituted by the organisations of the member states became the common research basis, whose research support is given by the ESPON established in 2002 and by the ESPON 2013 accepted on 7th November 2007, referring to the second research period [12][13].

⁴ The Charta of Leipzig deals with the towns emphasizing the importance of the towns in the establishment of the future regional policy of the Union. The Charta says that we have to think about the development of the town and country regions in a different way [10].



In its chapter titled "1.1.1. The Facilities of the Polycentric Development in Europe", EPSON deals with the questions of what kind of problems the effort to polycentrism has to face with, on different levels [9]:

- Macro-level (European Union), solving of the "Pentagon Problem" is a challenge,
- Mezzo-level (national), the task to solve is the optimizing of the division of labour among towns (e.g. the difference of Budapest and the big towns of Hungary),
- Micro-level (urban), the questions of the urban functions and the cooperation in the region have an important role.

From the point of view of the study, the Mezo and Micro levels have a significant role and together with the latest research topics of the 2013 ESPON program, such as the call in 2008 referring to applied research projects titled "Towns and agglomerations: their functionality and development possibilities in terms of the European competitiveness and cohesion". Later on we are examining the connection of the documents about the Hungarian regional development to that of the European Union.

2.3. The relationship between the documents about the Hungarian regional development and town development

The documents about the Hungarian regional development are significantly dealing with the question of the town development as well. The Conception of the Hungarian Development Policy (96/2005 (XII.25.) Act of Parliament, abbr. OFK) – which is a long-term conception of regional policy of Hungary – and the Conception of the Hungarian Regional Development (97/2005 (XII.25.) Act of Parliament, abbr. OTK) complementing the OFK in terms of regional planning are introducing the extension of the term "Development Pole" [25][27] (Figure 2).

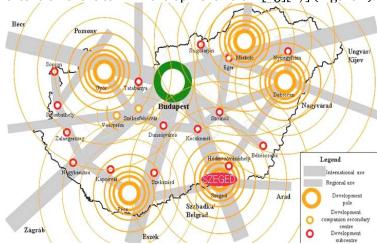


Figure 2. Regional development poles and axes in Hungary *Resource*: own editing figure based on OTK (2005) p. 39.

The OFK (2005) aims at "The balanced regional development and the establishment of the polycentric town network" 6, while the OTK emphasizes the importance of the pole-towns, and it writes in the IV.2. part of the document that "... it is necessary for the country to have poles contributing to the competitiveness, which are crucial elements of a harmonic, polycentric and cooperative town network." (OTK 2005, p.14).

Some chapters of The New Hungary Development Plan (UMFT) – especially chapter 7 – are dealing with the strategic thoughts of the OFK and OTK: together with the

polycentric development ideas supporting the balanced and harmonic regional development of the European Union, it sees the demographic and economic balance of the country in establishing a polycentric town network defined as "Development Pole" to realize the development aim of the five economic zones worked out in the Conception of Residential Network Development of Hungary in 1971 [32]. While the National Development Plan (abbr. NDP) only mentions some development priorities (NDP 2004) for the period 2004-2006, the UMFT emphasizes the expansion of *the employment and the establishment of conditions of the constant growth* to which it wishes to start harmonic state and union developments, including regional development (Schedule 1).

According to the Integrated Town Development Strategy of the UMFT, the towns marked as development pole contribute to the economic growth in a polycentric way, and it is realized in a cooperative town network system [32]⁷. They play a crucial role in determining the competitiveness of their region. Although the UMFT puts stress on the importance of the towns/town network in terms of competitiveness, these towns have been emphasized in case of the issues of project conceptions and union supports.

⁵ According to the Act of Parliament 97/2005 (XII.25) development poles can be: Győr, Miskolc, Debrecen and Szeged. Later on a 6th element has became a development pole representing the economic zone of "Székesfehérvár-Veszprém-Tatabánya" [27]. ⁶ OFK, part 2.4.9: Balanced Regional Development [25].

According to the EC Regulation of Council 1260/1999 about the general regulation of the Structural Funds, the member states having less developed regions have to work out their development objectives and priorities within the frame of the National Development Plan (NDP) and propose them to the European Committee to ask for the funds [8].





So towns regarded as development poles in Hungary have the function of economic developing centres built on exploiting special innovation potentials, which can apply for home and union sources with a bigger chance in case of other investments (town rehabilitation, school and hospital development, traffic development).

Schedule 1. Operational Programmes of the New National Development Plan (UMFT)

Schedule 1. Operational Programmes of the New National Development Plan (OMF1)						
Priorities	Operational Programmes	Financial				
Thornes	Operational Trogrammes	Sources (billion HUF)				
Development of Economy	Economic Development OP (GOP)	690,0				
Development of traffic and transport		1703,2				
3. Renewing the Society	Social reform OP (TÁMOP)	966,0				
	Social infrastructure OP (TIOP	538,9				
4. Environmental and energetical development	Environment and Energy (KEOP)	1140,0				
5. Spatial Development	OPs of the 7 regions of Hungary: Nyugat-dunántúli OP Közép-dunántúli OP Dél-dunántúli OP Dél-alföldi OP Észak-alföldi OP Észak-magyarországi OP Közép-magyarországi OP	1609,4				
6. State modernization	State reform OP Electronic government OP (ÁROP)	140,7				
ÚMFT (communication and coordination)	Excecutive OP (VOP)	87,2				
TOTAL (billion HUF)		6875,4				
n n	l'i' l l III/IVII/					

Resource: own editing based on UMFT (2007, page 9.)

3. THE NECESSITY OF THE POLYCENTRIC REGIONAL DEVELOPMENT IN PRACTICE: THE IRISH EXAMPLE

In 2002 the Irish Ministry of Environment and Self-government officially presented the National Spatial Strategy of Ireland (NSS) for the period 2002-2020, in which the application of the principals in the ESDP occur obviously [5].

Although the Buchanan report of 1968 mentioned growth points on national and regional level, it can be said that in the beginning of the 70s the regional planning was completely missing from the Irish regional policy [30]. In the 70s and 80s, the importance of the interregional policies decreased and the focus was put on the development policy of the country. Due to the strict country budget, the consciously built national development policy, and the wide social consensus, Ireland produced the biggest economic growth from the member states of the EU by the 1990s (Horváth 1998b). In 1987 the GDP of Ireland barely reached the 69% of the average rate of the EU-15. However, in 2003 this rate was 136%, which was due to an average 6,9%-growth in the 1990s [31].

Despite the economic success Ireland had to face with more regional development problems. Because of the size of the country, only Dublin could compete on a European level, so the advantages of the economic growth could be felt well around the capital city [4]. In order to avoid the problems, the government emphasized the necessity of the social, economic and environmental development in the National Development Plan of 1999 [23]. The thought of the balanced regional planning became complete in the NSS in December 2002, with a delay because of the Irish political elections of 2002. From the offers of the ESDP, the balanced regional development, the new interpretation of the town-country relationship and the polycentric development can be identified in the NSS.

Accordingly the Irish National Developmental Strategy determines its objectives on the basis of three key elements:

- 1. Because of its advantages and special competitiveness in Europe, the competitiveness of the Greater Dublin Areas and the role of Dublin in the country will be more strengthened in a way that it will not result in a further regional growth.
- 2. The so called "gateway cities" must be appointed whose support provide the balanced growth and development of the country. Besides Cork, Limmerick/Shannon, Galway and Waterford assigned by the National Development Plan of 2000-2006, the NSS assigned four other "gateways" as such poles (Figure 3).
- 3. Besides the eight "gateway cities", nine sub-centres (Hub) must be assigned, which mutually help each other as a sub-network, and expand the positive effects of the economic development on the country areas as well.



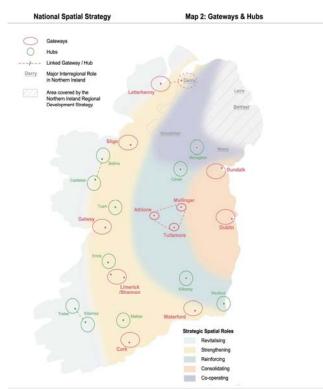


Figure 3. The elements of polycentric city network concept in the Irish Spatial Development Strategy.

Source: DOELG (2001)

According to the "Spaak committee report" published two years before the establishment of the European Community, the regional inequalities will disappear with the economic growth [29]. The example of Ireland contradicts this statement. On the basis of the data of the Dublin Regional Authority of 2002, the growing of the region of Dublin was more by 28,9% than the average GDP growth of the country, which was significantly higher than any other regions of the country [6]. These figures refer to the fact that Ireland - often called as "Celtic Tiger" because of the intensive economic growth in the 1990s - cannot have a long-term and sustainable development for the lack of the regional development policy. In order to dissolve the demographical and transportation problems of the economic development in a given region, it is necessary moderate the too much economic concentration.

In Hungary the town network including Miskolc, Debrecen, Győr, Pécs and Szeged have the role of an economic counterpoint of the capital city, similar to the "gateway cities. Their future success and competitiveness lie in how they can build their competitiveness

on their natural advantages. According to the statements of Lengyel (2003), there is no success advice that can be used in advance when determining the competitive elements. Determining the competitive elements always depends on the combination of the factors. So the economic development strategy established in the towns, decentralized and based on endogen sources and knowledge can determine the successfulness of the domestic polycentric town network. This strategy is based on the improvement of the competitiveness of some industrial branches and on their beneficial effects on the other industrial branches. This process can be generated by an (application) support system applying to the establishment of the balanced regional development and the polycentric town network, whose successfulness is examined on domestic examples in the followings.

4. THE SITUATION OF THE INVESTMENTS IN THE SOUTH-GREAT-PLAIN REGION

The goals of the investment: the growth and the development. The efficiency of the investment depends on the increase of competitiveness. However, the improvement of the competitiveness can be realised by considering the innovation maximally. Several economists proved the role of the innovation in the growth. Joseph Schumpeter, a well-known economist, claims that the growing periods are characterised by mass innovation. Moreover, he emphases that in a national economy "the entrepreneur is not discovering new technological methods, nor he is not the capital's owner; but he organises economically the labours, the capital and the technical innovation, in the hope of achieving further profit" [3].

How does the investment influence the development? The answer is not simple, because the effect of the investment depends on a lot of characteristics. The volume of the investment, its specific value projected on the population, its efficiency, the relation between the net and gross investment, the aim of the investment (building, machine, furnishing, equipment, vehicle), are very important. That is, what we spend bigger proportion of the amount on, which technological- technical level the investment realises, which is its relation to the innovation, what kind of structure the sector has, and how is its distribution concerning the economical form [16].

The fact is worrying in the South-Great-Plain that during the years the otherwise low specific investment value shows a declining tendency, that is, the projected investment value on the population does not increase despite the continuous decrease of populations. None of the counties in the South-Great-Plain could produce stable increase of investment in the examined interval (4th diagram). This process can result in the decrease of economical competitiveness in short-term too, which can generate



negative processes in middle-term (e.g. decline of the employment situation, increasing unemployment, migration, decrease of the attractions, worsening population structure, lower paying level, less effective demand...etc.) [1].

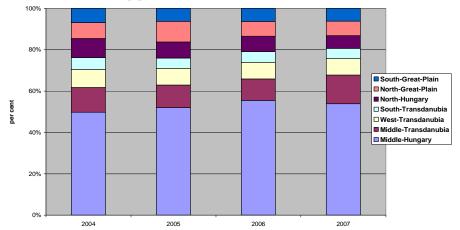


Figure 4. Hungarian investments on regional level between 2004-2007. Source: own editing based on KSH (2008)

The innovation became one of the most important factors of the production, like result of economic-socio changes in our globalising world in the last period.

Due to the accelerated technological development- just specific new market goods, new services, new production methods, introducing constitutional systems, market behaviour forms and commerce channels can realise the competitiveness of the enterprises in long term by continuous research-development process and by innovation activity [20]. most of the cases, the enterprises are not able to do it themselves, so the institution system needs regional and innovation support and the efficient operation of institutions which function like bridges.

The innovation has got a prominent role in the development. Unfortunately the demand side of the innovation is so low now (and was in the past) because of the state of the development of the enterprises operating in the South-Great-Plain region, their innovation capacity, and their performance. Furthermore, the scientific background, the faculties of the University, the numerous institutions making special basic and specific researches, and the human sources level are prominent in the region [22].

Concerning the measure of investments, the investment tendencies have become permanent in 3 counties. In Csongrád county – resulting from the economic potential and from a less population – the value of the index is always contradictory in the region, in the competition of counties; till the last place of Békés county is due to its backward infrastructure, its peripheral situation, and its backward economic system on regional level too (Figure 5).

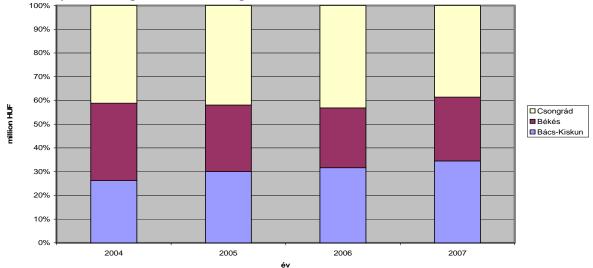


Figure 5. The value of investments per 1000 capital in the South-Great-Plain region *Source*: own editing based on KSH (2008)



5. THE REGIONAL DIVISION OF THE ECONOMIC DEVELOPMENT DEPENDING ON THE PROJECT SUPPORTS

We have to judge the project support to think long-term that, basing on the education level, more and more knowledge-based, cooperating sectors of industry which represent elevated added values can settle down and function in the region. These sectors of industry realising a part of innovation culture form a firm ground to the economic development [21]. Szeged town fulfils a prominent role of pole in the New Hungary Development Project, which in the Biopolys programme can possess a big importance regarding the long term economic development of the town. To the knowledge-based investments the conditions are done: the motorway M5 reached Szeged and the Serbian borderline, so each big town of West-Europe could be available on motorway. The availability on railway improved too (the denseness of running of rails, the speed) in the past years. The regional airport development can make the region better too. We can feel the effect of the logistic centre near Szeged. But the developments can create relatively fewer workplaces, so in the future we have to concentrate on creating workplaces in the South-Great-Plain region.

We have to note that after joining the EU a lot of investments and investment-encouraging processes happened in Hungary, of which a lot touched the South-Great-Plain region directly or indirectly. The inauguration of the already mentioned motorway M5 in 2006, the renovation of Regional Airport of Szeged and the economy stimulating effects of the first and second national development projects, which began from 2004 when Hungary became finally member of EU, touch directly the South-Great-Plain region. The development of underdeveloped regions (among the South-Great-Plain) got a prominent place in the economic programmes.

The region received 75,5 billion Hungarian forint development sources from the National Development Project to economic and infrastructural investments. We have to control the effective use of theses sources in the future years and we have to fortify the generated economic process.

The next chart presents how the Hungarian regions and counties were shared per capita from the sources of National Development Project (Schedule 2).

Schedule 2. The measure of support per capital per county and per region

F						
County	Support per capital in thousand forints					
Heves	77					
Baranya	71					
Csongrád	64					
Hajdú-Bihar	64					
Tolna	59					
Borsod-Abaúj-Zemplén	58					
Békés	57					
Szabolcs-Szatmár-Bereg	56					
Budapest	56					
Fejér	53					
Bács-Kiskun	51					
Jász-Nagykun-Szolnok	48					
Zala	44					
Vas	43					
Komárom-Esztergom	43					
Somogy	43					
Győr-Moson-Sopron	38					
Veszprém	36					
Pest	32					
Mógnód	27					

Region	Support per capital in thousand forints		
Dél-Dunántúl South-Transdanubia	58		
Észak-Magyarország North-Hungary	58		
Dél-Alföld South-Great-Plain	57		
Észak-Alföld North-Great-Plain	57		
Közép-Magyarország Central Hungary	46		
Közép-Dunántúl Central Transdanubia	45		
Nyugat-Dunántúl West-Transdanubia	41		

Source: own editing based on KSH (2008) and NFÜ (2009)

We can analyse important information about the pole towns from the chart. Examining on county level Pécs (Baranya county) precedes Szeged

(Csongrád county), Debrecen (Hajdú-Bihar conty), Miskolc (Borsod-Abaúj-Zemplén county) and Győr (Győr-Moson-Sopron county) pole towns in the list.

On region level we can examine two groups. Approximately the region of Pécs, Miskolc, Szeged and Debrecen received similar supports. The town of Győr pole town got the lower support. Concerning the support rates we can say that the National Development Project concentrated more on developing the underdeveloped regions and poles. But the effect of the support amounts did not result in positive changes in the pole town regions immediately. The next chart represents this process. This chart examines the GDP division in percentage in the regions of pole towns (Table 3).

Unfortunately, in spite of the support sources, the region the more supported pole regions (Pécs, Miskolc, Debrecen and Szeged) show a decrease from the GDP share. The supports given to the developing poles cannot result in a prominent economic effect on short-term, instead keeping up, or they decrease the danger of back warding. The sources of the New Hungary Developing Project are

■ AVOP

GVOP

□HEFOP □KIOP

ROP





tenth bigger than that of the National Development Project. This quantity of sources can start the economic development in the pole towns and in their regions [32].

Schedule 3. The division of GDP in percentage in the Hungarian regions between 2004 and 2006

Year	Central Hungary	Central-Trans danubia	West-Trans danubia	South- Trans danubia	North- Hungary	North-Great- Plain	South-Great- Plain
2004.	23,71	15,53	16,62	11,57	10,56	10,68	11,33
2005.	24,94	15,64	16,00	11,39	10,39	10,50	11,14
2006.	25,57	15,13	16,30	11,20	10,25	10,57	10,98

Source: own editing based on KSH (2007)

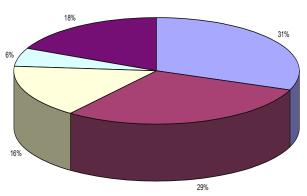


Figure 6. The composition of the support sources of the South-Alfold region. AVOP: Agricultural and rural operational programme; GVOP: Economic competitiveness operational programme; HEFOP: HUman resource development operational programme; KIOP: Environmental Protection and Infrastructure development operational programme; ROP: Operational programme of Regional Development Source: own editing based on NFÜ (2009)

However the quantity of sources can show its effect maximally in middle-term. particularly concerning innovation sectors of industry, which give the structures of pole towns. We have to spend 5-10 years to arrive from the base search, base developing to creating numerous workplaces, and we have to get continuous sources.

The 6th figure shows the 60% of NDP sources arriving to the region was use to develop the economy definitely (29% Economic Competitiveness Operative Programme and 31% Agricultural and Rural Operative Programme), which can serve as a good tendency in the future.

5. CONCLUSION

We can summarise the next conclusion by analysing the charts and diagrams, which reflect on the particularities of investments after the political transformation.

- In the period after the change of regime (1991-2006) the central Hungarian region shared by an increasing part from the investment volume per year in Hungary. The volume of the increase is 1,1% average per year. This elevated value could realise that the part of the others regions decreased significant. This process fortified the regional development, by all its negative results. The decrease was the most drastic in the South-Great-Plain.
- The value of investments per 1000 habitants was unfavourable regarding the relations among the regions in the South-Great-Plain region. The low values became permanent for the last, and before last years. The part of investment per habitant was not the quarter of the Central Region's in 2005.
- The volume of investment per capita is the next in the region South-Great-Plain: the best Csongrád, then Békés, and the last: Bács-Kiskun County. The two last counties changed place by 2005.
- The fact, that during the years the low investment per capita shows a decreasing situation, is worrying. This means that the value of investments per capita does not increase contradictory to the continuous decreasing of the population. None of the South-Great-Plain counties could produce steady investment increasing per year in the period. This process can result in the decrease of economic competitiveness in short-term, which can generate several negative processes on middle-term. (Unfavourable employment situation, increasing unemployment, migration, decrease of attractions, declining population structure, lower paying level, lower effective demand, etc.)
- In the region the investment rate (the volume of investment in percentage of GDP) did not reach the half of the average level at the beginning of the decade. It is right that this index showed a dynamic increase till 2004, but the values of the last examined year are 6 percent lower than the average of the country.
- The division of the economic sectors of South-Great Plain's investment performance values shows a significant difference in 2001-2005. Fortunately, the part of public service in this region is the





highest and occupies the thirst place with its part of investment in the agriculture. Unfortunately, the part of industry from the performance is the last and the before last with the South-Danube region. While nowadays the competitive industry profession sectors function like head sectors, so this low value does not help the development of the region.

The role of the innovation is prominent in the increase. Unfortunately, the demand part of the innovation is not so high because of the state of development working in the South-Great-Plain region, the innovation capacity and their performance. In the area the scientific background is extraordinary good, the faculties of the University, the numerous institutions making special basic and specific searches, and the human sources level.

Due to the investments which produce novelties "motoric units" which result increasing rate higher than average and help their development by forming a close connection with them [19].

The capital needs of the innovative sectors are very high. While in the region innovation potential biotechnology industry sector is one of the sectors which need a lot of capital [2], the innovation potential development in the South-Great-Plain region can realise just with a big capital investment. We have to identify the innovation potential facts so that we can use the capital in the best way. In the near future - in the hope of developing the region and Szeged pole town- we particularly have to concentrate on the economic sphere, we have to fortify the connections among the institutes which make the educations searching institutes, we have to fortify the relationships between the innovation oriented of micro regions and twin towns, we have to help that the institutes can connect to the national systems of the innovation, because the investments can give the results awaited.

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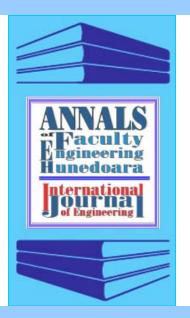
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