### CIVILIA ODBORNÁ REVUE PRO DIDAKTIKU SPOLEČENSKÝCH VĚD

# Assessment of the attractions of the residential place in Hungary

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Abstract: The goal of measuring success in the territorial sense in our opinion is to assess the position of a given geographical unit as objectively as possible, and on this ground to look at what needs to be done for its development. This may serve as the basis of a development programme that is special but still flexibly modifiable, coordinated by the municipality, the non-governmental actors, the academic sphere and the economic entities; a programme that the local stakeholders know and support as well. Features of successful settlements may be quite varied, from flexibly modifiable economic structure through highly qualified labour force and favourable social structure right to the environment of the settlement. But what is the opinion of the people most concerned, the inhabitants of the settlements? How do they see the main advantages or disadvantages of their own environment?

**Keywords:** competitiveness, success, local attractions, Budapest, Hungary

#### Introduction

#### Interpretations of competitiveness and success

Competitiveness can be approached form two aspects. "It expresses achieved, realised and somehow quantifiable successfulness, economic performance, i.e. results achieved in competition, on the one hand; and

also means the potential chance in the competition, the ability, skills and attitude to successfully compete, on the other. ... We can also see, in addition to the interpretation of success for the past and the future, an expectancy of the lastingness, future persistence of the present successful performance." (Lengyel, 2003, p. 173) To put it another way, we can distinguish between so-called input-oriented and output-oriented competitiveness. The quantification of macro-economic performance is typical for output-oriented competitiveness, whereas the input-oriented attitude is more focused on the existence and quality of the environmental elements, the background criteria.

A region can be called competitive "if its strategically embedded economic base optimally uses and generates (promotes the expanded reproduction of) high order resources of the region purchased at market prices, parallel to reaching lasting competitiveness on the relevant international markets." (Palkovits, 2000, p. 125)

Being successful is a category broader than competitiveness and lasting for a longer duration of time: "...regional competitiveness relates to the economy of the region, the actors of its economy and the closely related social factors, i.e. is a category of regional economics, comprehensible in the short and middle run and strongly influenced by market cycles and innovation waves. Successfulness, on the other hand, is a longer term category, also including extra-economic factors and taking the region's society, environment, settlement stock, geographical position etc. into consideration." (Lengyel, 2003, p. 290)

In successfulness, the importance of non-quantifiable characteristics in addition to measurable factors is emphasised by Boddy (Boddy, 2002) when attributing a special importance to the effective operation of local administration, the level of business services and the role of social infrastructure. The existence of the following actual factors can make a settlement or a spatial unit successful (Enyedi, 1997, Jensen-Butler, C. 1997, Cheshire, 1999):

- ability to change the economic structure (with special regard to the spread of sectors with value increasing and multiplier effect),
- high proportion of so-called value increasing sectors in the service industry (presence of high level business and financial services,

- research and development, higher education, high level cultural services),
- knowledge based production is typical (in connection with the significant consumption of the highly qualified labour, with their above-average demand for a high quality settlement environment, quality of life and services),
- the presence of innovation capacity and research and development is strong (chance of technology transfer),
- successful cities are cities that have power, decisions are made in successful cities, these are the places where corporate and financial centres are concentrated (concentrating thereby highly qualified employees with high incomes in the respective settlements),
- presence of strong and growing middle class (with above-average qualification and income), with favourable urban social structure (paradoxically, in practice this can coincide with significant social polarisation and emerging social conflicts),
- valuable settlement environment, adequate urban policy and provision of high quality public services (related to the non-material needs of the population),
- successful conflict management at a level acceptable for the public opinion, with the intention of preserving the social environment,
- significant external (international) relations, embeddedness in the urban relationship system of an international macro-region (which may be occasional trade relations as well as long-term information and network relations, and the development of external relationships requires background criteria like transport junctions, airline and railway connections or hotel capacities with adequate quality and quantity),
- increasing incomes and employment, as an effect of which significant amounts of development sources are raised from locally collected taxes (provided that the centralisation of taxes by the central state budget is not excessive, as in this case gaining the sympathy of the redistributing central power forces the application of totally different methods, separating urban development and the development of the local economy from each other).

In the lucky case success is not an isolated phenomenon but leads to the birth of successful regions, development axes which will found the competitiveness of a whole country or group of countries in the long run.

#### 1. Research findings

We made a layered questionnaire survey in 2004–2005, consisting of two parts. In the first part of the research one thousand private persons responded to our questions (the five aspects taken into consideration during the survey were as follows: breakdown of the Hungarian population by regions and, within this, by settlement size categories; breakdown of the inhabitants by gender, age groups and educational attainment). Owing to the face to face interviews, almost all questionnaires were suitable for analysis. Inspired by the initial results, in the later phases of the research we completed the survey by a new questioning session using an adequate number of sample persons (Koltai, 2006, 2008).

We wanted to find the answer to the following questions:

- What aspects do Hungarian citizens prefer when choosing their place of residence?
- What characteristics, advantages and disadvantages do they use to describe the settlement types of different size?
- Which Hungarian settlements are considered competitive by the respondents and why?
- Which are the settlements that the stakeholders see as real centres of gravity?
- How much are the respondents willing to move to another settlement?

In the light of the results, we repeated our survey of the population in 2012, allowing thereby the comprehensive evaluation of a period of almost ten years. In this phase of data recording we used the method of a layered questionnaire survey again (the four aspects considered were as follows: breakdown of the Hungarian population by regions, breakdown of the population by gender, age groups and finally educational

attainment), in which it was one thousand private persons again who responded to our questions.

Our analysis aimed also this time at allowing comparability, based primarily on statistical data with other researches made on the topic. The interpretation of competitiveness during the survey is not restricted to an exclusively economic approach to the concept; it is seen as a broader, more complex issue also involving social and environmental aspects, and quality of life in general.

#### 1.1 Attractions of the residential place in 2012–2013

In our repeated survey we enlarged the range of aspects influencing the attraction of settlements from 12 to 20. We found it necessary for two reasons. On the one hand, we took into consideration the factors mentioned in larger numbers in the category "other" of the 2004-2005 survey (accordingly, factors like "ethnic composition of the population" or "public safety of the settlement" were now seen as categories on their own); on the other hand, we wanted to see what extra information we would get from breaking into pieces three former factors with rather heterogeneous content (settlement infrastructure, educational features, width of urban functions).

For this consideration, we broke the category "settlement infrastructure", seen as most important in the previous survey, into four elements (natural gas supply; canalisation; internet access and mobile phone services; roads), while the former category "education" was supplemented with one extra factor ("existence of kindergarten and primary education"). In addition, the aspect called "width of urban functions" was now considered as two separate categories (considering "possibilities of administration" and "development of commercial network" separately).

Based on the findings of our research conducted in 2004–2005 (see Figure 1), our hypothesis was that attractions of still primary importance were "condition of the settlement infrastructure", "transportation possibilities", "employment circumstances", "complexity of locally available health services", and "quality of the residential environment" in general.

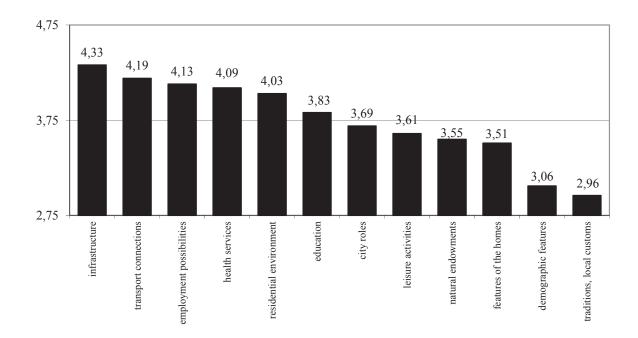


Figure 1: Order of importance of the attractions of settlement by the responses of the Hungarian population, 2004–2005

Source: Questionnaire survey of the authors (2004–2005)

As a result of these changes, the list of factors influencing the attraction of settlements in our 2012–2013 research is as follows (in brackets: new categories in the second survey):

- 1. Complexity of health services (from general practitioner to in-patient hospital care, all services are available in the settlement).
- 2. Existence of kindergarten and primary education. (new category)
- 3. Existence of complete educational structure (institutions from primary education to higher education).
- 4. Infrastructure in the settlement on the whole (public utilities, roads, possibilities of mass communication).
- 5. Within settlement infrastructure: existence of natural gas supply. (new category)
- 6. Within settlement infrastructure: existence of canalisation. (new category)
- 7. Within settlement infrastructure: quality of internet access and mobile phone services. (new category)
- 8. Within settlement infrastructure: quality of the public roads within the settlement. (*new category*)

- 9. Development level of shopping facilities (existence of larger shops, supermarkets). (new category)
- 10. Existence of the possibilities of administration (e.g.: public institutions, bureaus in addition to the mayor's office). (new category)
- 11. Quality of the residential environment (e.g.: size of green areas, cleanliness, volume of environment pollution).
- 12. Natural endowments of the settlement (climate, orography, river).
- 13. History, traditions, local customs of the settlement.
- 14. Demographic features age composition of the population.
- 15. Demographic features ethnic composition of the population. *(new category)*
- 16. Existence of transport connections (proximity of national roads and railways, accessibility of Budapest).
- 17. Employment possibilities and circumstances (number and quality of jobs, level of wages).
- 18. Possibilities of leisure activities (e.g.: education, culture, sports, restaurants).
- 19. Features of the homes (age, type and number of residential buildings).
- 20. Public safety in the settlement. (new category)

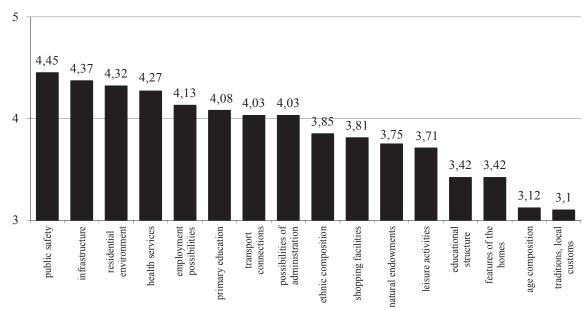


Figure 2: Order of importance of the attractions of settlement by the responses of the Hungarian population, 2012–2013

Source: Questionnaire survey of the authors (2012–2013)

During the evaluation of the data of the 2012-2013 survey (Figure 2), the highest values were given to the factor "public safety in the settlement" (4.45), followed by "infrastructure of the settlement" (4.37), "quality of the residential environment" (4.32) and "complete range of health services" (4.27). On the five-grade scale, another four factors were ranked above 4 (employment possibilities and circumstances, existence of kindergarten and primary education, transport connections, and possibilities of administration). This shows that within the services of education the role of kindergarten and elementary education was appreciated (the category "educational structure", as a single category in our previous research had been given a score 3.83, this time it was broken into two markedly different parts), while the division of the category "urban functions" tells us that that the existence of administrative services and public institutions is somewhat more important for respondents than the shopping facilities within the settlement. In addition, there was a slight increase in the score given by the respondents to the quality of the residential environment and to health services.

Breaking the category "settlement infrastructure" into four parts (natural gas supply, canalisation, internet access and mobile phone services, roads) did not result in significant differences, as scores were within the 4.01–4.35 range. The highest score was given to the existence of canalisation, the lowest to the quality of the roads.

The second group of attractions of the residential places, seen as less important, is led by a new factor again: this is "ethnic composition of the population" (3.85), the last factors in the order are, as in our previous research, the "age composition of the population" and the "history, traditions, local customs of the settlement". Compared to the previous survey, a factor slightly more appreciated was "natural endowments of the settlement", while in the category "other" it is only family relations and friendships that are worth a mention (even though with a negligible, below 2 per cent frequency).

Our hypothesis was then partially verified, as public safety as an attraction of the settlement unexpectedly ranked first.

We compared the findings of the 2004–2005 and the recent survey also from the aspect of whether a similar structure of factors would be

shown by the correlation among the variables after almost ten years. As the range of variables was extended in the new data recording, we tried to reproduce three previous roles – education, infrastructure and urban functions – by the simple arithmetical averages of the "sub-variables". During the factorial analysis, 62.4 per cent of the information of the variables was preserved. In order to have a more clearly demonstrable structure, we used varimax rotation (see Table 1).

Table 1: Factors of the attractions of the place of residence in the responses of the population, 2012–2013

attractions	factor of services	factor of living conditions	factor of the environment	human factor
health services	0,860			
education	0,563			
infrastructure		0,560		
city roles	0,675			
residential environment			0,805	
natural endowments			0,699	
traditions, local customs				0,823
demographic features				0,782
transport		0,694		
employment possibilities		0,688		
leisure activities		0,707		
features of the homes				

Source: Questionnaire survey of the authors (2012–2013)

The factor of the environment and the human factor show the same picture, while infrastructure and transport "moved" from the previous category aggregating services to the category formerly called factors of living, now living conditions. (Although the category of homes is still most closely related to the factor of living conditions, the tightness of the correlation remains below 0.5.)

Similarly to our previous research, we analysed in details the correlation between respective attractions and the aspects securing representativeness, like age groups, educational attainment and size of the place of residence of the respondents.

First we focused on what attractions of the settlements divide respondents the most, and what are the ones on which there is the strongest consensus of them. It is the complete educational structure from elementary to higher education and the opportunities of passing leisure time that show the broadest variety of importance for respondents belonging to different age groups, having various levels of educational attainment and living in settlements of diverse sizes. Other factors significantly dividing respondents include the complete range of health services, the access to internet and the quality of mobile phone networks, the possibilities of employment and the development level of the available commercial facilities. The other extreme is represented by four factors partially related to infrastructure where there is no grouping of any kind that shows significant differences, i.e. respondents attribute by and large the same importance to infrastructure including canalisation, the quality of roads, features of the housing stock by age and type. Another such factor is the age composition of the population.

If we evaluate correlations among the respective attractions and age groups separately, the following statements can be made. Stronger significance to the age of the respondents was demonstrated at approximately half of the factors. These factors include health services, kindergarten and elementary education, the complete range of educational services, internet access and the quality of mobile phone services within infrastructure, quality of administration, quality of the residential environment, history and traditions of the settlement, the ethnic composition of the population, employment opportunities and leisure facilities. (Significant cases were the ones identified with values below 0.05.)

We also wanted to find out if there was a correlation between educational attainment of the respondents and their responses to the respective factors. There are seven factors altogether where we detected a more significant correlation. These include the quality of internet access

and mobile phone services, the development level of the commercial network, the quality of the environment, natural endowments of the settlement, ethnic composition of the population, employment opportunities and leisure facilities.

It seemed to be an interesting venture to explore the correlation between the size of the present place of residence and the factors. Four factors can be mentioned where we found a strong significance. These are: health services, the total of the educational services, the retail network and the quality of administration. In the settlements with the smallest number of inhabitants (less than 2,000 people) those factors were, not surprisingly, seen as least important that are less typical for this type of settlement. Accordingly, factors lagging far behind the values of the towns and cities included "complexity of health services" (3.82), "development level of the retail network" (3.31), "conditions of administration of affairs" (3.68), "transport relations" (3.71) and the "existence of the complete range of educational services" (2.89). (The latter, anyway, is the minimum value in any breakdown.) Unexpectedly, on the other hand, the assessment of the access to internet and mobile phone networks (4.36) is even above the figures of urban settlements. As regards the other pole of the settlement network, cities with more than 50,000 inhabitants, two high values should be mentioned: the scores given to the "complete range of educational services" (3.6) and "development level of the retail network" (3.99).

## 2. Assessment of the attraction of the towns and cities at national and regional scale

As in our previous research, we also found it interesting now to look at how a town or city is assessed by respondents from all over the country, and also within their own regions. In the light of the findings of our 2004–2005 research we had a hypothesis that within their own regions almost all settlements will be assessed more favourably than at national scale, in almost all respects.

During this present survey we analysed the data recorded in the following way:

- for each settlement we compared the opinions of the 1,000 respondents of the national sample to the answers received from the inhabitants of the respective region home to the town or city, as a result of which the characteristic features of the respective settlements could be seen (in the Figure 3 they are marked with "national" and "regional"),
- on the other hand, we narrowed down the survey to those respondents who considered the respective settlement competitive, and so the subject of analysis was now the breakdown of "competitive responses"; in other words, we were looking for the factors underrated at national or regional scale (marked with "competitive nationally" and "competitive regionally"),
- we also made a time series in which we compared baseline data from almost ten yeas ago to the topical ones, thereby looking at the dynamism of changes.

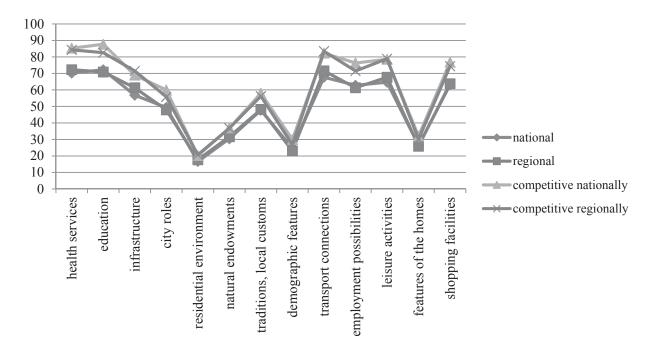


Figure 3: Assessment of Budapest by the responses of the Hungarian population, 2012–2013

Source: Questionnaire survey of the authors (2012–2013)

In the light of the aspects of analysis mentioned above, Budapest shows the following characteristics:

- it is still primarily a city that is an educational, health and transportation centre and also has advanced leisure services, excellent shopping facilities and outstanding employment opportunities, and this is why it is a competitive place of residence now in Hungary,
- comparing the national and regional lists made for the capital city, we cannot find any significant difference (unlike in the case of the urban centres) between the national and the regional lists in any respect, which is clearly demonstrated by the parallel lines in Figure 3,
- however, a difference compared to the 2004–2005 survey is a significant growth in almost all factors (up to 20 or 25 per cent) both by national and regional scale, i.e. more and more of the respondents think that Budapest has competitive advantaged in some respects (with the exception of demographic features and the quality of the housing stock where we can see a stagnation, in fact, a slight decrease can be seen in the index called quality of the residential environment),
- after the analysis of the responses considering the capital city of Hungary as a competitive settlement we can say that at regional scale there are no overrated factors, and even in a national comparison there are only slightly overrated factors like educational structure, the complexity of urban functions and employment opportunities; these are the factors that in opinions of the respondents from the country are even better than seen by the inhabitants of the region home to Budapest.

Of course both geographical comparisons (regional opinions vs. national assessments) and the temporal ones (changes experienced since 2004–2005) make it difficult for us to create homogeneous groups of settlements. Nevertheless we looked at the factors typical for towns and cities given at least 50 mentions, to see if the various factors showed any relation to the towns and cities. On the basis of the chi-square test (chi square=1122.6; degree of freedom=156; p-value<0.001) we found a significant correlation between the features manifesting the attraction, and the towns and cities. Figure 4 visually demonstrates the characteristic features of the correlation.

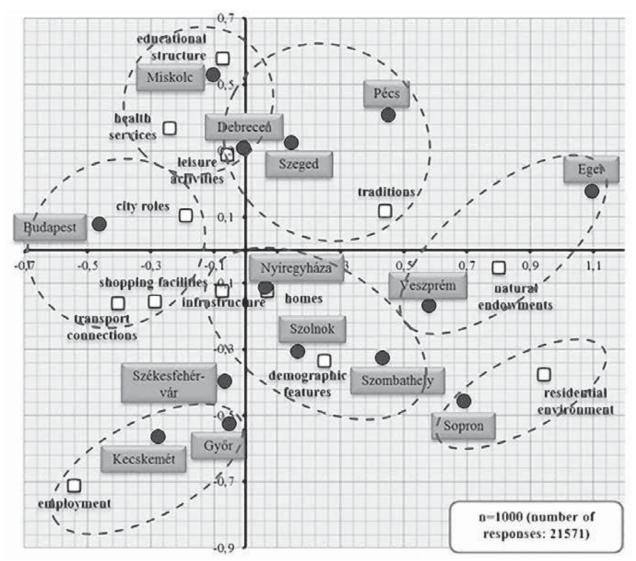


Figure 4: Correspondence map by the responses of the Hungarian population, 2012–2013

Source: Questionnaire survey of the authors (2012–2013)

The three most marked "groupings" are as follows:

- in Budapest well established transport relations, a wide array of urban functions and the development level of retail facilities are the most attractive factors. Budapest is also a separate category on its own inasmuch as there is no other town or city in Hungary where opinions of the national and the regional sample coincide so much (see Figure 3).
- Szeged, Debrecen, Pécs and Miskolc show partial overlaps, the intersection being leisure facilities, whereas educational structure and health services are stronger attractions for Debrecen and Miskolc,

the history and traditions of the settlement are more frequently mentioned in favour of Pécs and Szeged. Regional characters complementing these show that Debrecen, Pécs and Szeged are judged almost the same, in fact, their regional overrating shows similarities, but the temporal survey definitely marks the improvement in the values of Debrecen most dynamically, while in Pécs several factors are already stagnating or have even worsened since the survey of 2004–2005.

- In Nyíregyháza, Szolnok and Szombathely it is the housing stock and the age and ethnic composition of the population that are factors of competitiveness. A few less marked but visible correlations can also be seen that refer to the dominance of certain features:
- Eger and Veszprém are seen as attractive mainly for their natural endowments, while Sopron is renowned most for the good condition of its residential environment. In the case of Sopron and Eger, respondents of their respective regions complement this with educational structure; on the other hand, the assessment of Eger within its own region is better (as demonstrated by the better evaluations than by the national sample, the higher number of mentions by regional respondents and the comparison of the surveys made at different times).
- The definite competitive edge of Kecskemét and Győr is their outstanding employment conditions. Győr is unique because this does not mean an overrepresentation in the national sample (as it does in the case of Kecskemét), and what is overrated by the regional sample is the history of the city and its educational structure, which may as well refer to its potential future roles. Kecskemét is similar inasmuch as the circumstances of employment are seen as excellent by the national sample, but differences are more, as this feature for the time being shows an overrepresentation in the national sample, factors of competitiveness mentioned by the regional sample are different (instead of education it is transportation in general, leisure facilities and retail supply that are mentioned). Also, a less dynamic progress is shown by the comparison of the two surveys done at different times.

• Székesfehérvár is a bit of an exception, it "resembles" the former two cities the most, but its retail network and transport relations are so advanced that parallels can be drawn with Budapest. The slight declines and improvements over time, shown by the comparison of the two surveys, remind us of Pécs, while employment conditions overrated in the responses of the national sample may suggest similarities with Sopron and Kecskemét.

#### Summary, conclusions

In Hungary there is still very close correlation between the favourable assessment of settlements and their positions in the settlement hierarchy. It is still true that primarily the Hungarian big cities are considered as competitive and successful residential places. The proportion of answers specifying Budapest is outstandingly high and we can definitely say that the Hungarian capital city is a separate category on its own within the Hungarian urban hierarchy. Comparing the findings to the results of the 2004-2005 survey we can see that the position of Budapest has further strengthened year after year, both nationally and regionally more and more people think that the capital city has real competitive advantages in some dimensions. The strong second group is led by Győr and Debrecen, supplemented by Pécs and Szeged. A significant change compared to the findings of the data recording done almost ten year ago is that Győr and Debrecen reinforced their positions more than the average, while Szeged kept its position and Pécs had a slightly worse position in the ranking. The towns and cities at lower levels of the hierarchy may be elevated by their favourable regional positions or special endowments to a higher level of competitive settlements (examples for which are Sopron and Siófok, as well as Keszthely, Hévíz, Esztergom, Balatonfüred or Budaörs).

The goal of measuring success in the territorial sense in my opinion is to assess the position of a given territorial unit as objectively as possible, and on this ground to look at what needs to be done for its development. It is important to realize in what a respective settlement differs from other settlements of similar size and functions, because

the competition among towns and cities has many actors of similar endowments, therefore some speciality must be found. If we accept that the goal of competition is to enhance the well-being of the local residents, we can also say that the tool of successful participation in the competition is a special, but flexibly modifiable development programme based on the partnership of and operating in the coordination of local politics, businesses, the civil sector and the academic sphere; a development programme that the local stakeholders know and support as well.

Features of successful settlements may be quite varied, from flexibly modifiable economic structure through highly qualified labour force and favourable social structure right to the environment of the settlement. Those European regions have become really successful that were able to define and operate a strategy on the basis of their own indigenous endowments. Such a strategy must always be closely related to the competitive advantages of the local businesses, so first we have to explore the potentially competitive sectors and also collect the factors from which their real competitive advantages can be derived from. Regions incapable of making programmes on their own can only temporarily stabilise their positions, and even that usually happens from the use of some central support, only.

The goal of the research was to provide information for the elaboration of such a development strategy based on real local needs. The findings clearly demonstrate that the different parts of Hungary are not only characterised by different endowments and very diverse relative positions, but often also by population with diverse needs. "The interpretation of success in city regions, and the contemplation of the competitiveness of these areas depend upon the structural and residential conditions of the social stakeholder groups. These evaluations are not static then and not normative, either, but very much determined socially and regionally, and very differentiated..." (Szirmai, Váradi, 2009, p. 190)

Of course we are aware of the fact that a considerable group of the attractions of the settlements is not exclusively fromed by local decision-makers, and that only longer term programmes can lead to favourable changes in many cases. Nonetheless we think that responsible

development concepts that are specific, maybe concern exact target groups in the settlements and strive for long-term economic success can never neglect personal experiences, and the utilisation of them in a complex regional view.

#### Literature:

- BODDY, M. Linking Competitiveness and Cohesion. In BEGG, I. (ed) *Urban Competitiveness. Policies for Dynamic Cities*. Bristol: The Policy Press. 2002, pp. 33–52.
- CHESIRE, P. Cities in Competition: Articulating the Gains from Integration. In *Urban Studies*, 1999, Nr. 5–6., pp. 843–864.
- ENYEDI, G. A sikeres város. In *Tér és Társadalom*, 1997, 4, pp. 1–7.
- JENSEN-BUTLER, C. Competition Between Cities, Urban Performance and the Role of Urban Policy: a Theoretical Framework. In JENSEN-BUTLER, C; SHA-CHAR, A., WEESEP, J. VAN (eds.): *European Cities in Competition. Aldershot-Brookfild.* Averbury Publishing Company, 1997, pp. 3–42.
- KOLTAI, Z. A magyar lakosság és vállalati szféra lakó-, illetve telephelyválasztásának szempontjai. In *Területi Statisztika*, 2006, 3. pp. 240–254.
- KOLTAI, Z. Evaluation of Settlement Attractivements in Hungary. In *Tradecraft Review*, Special Issue, 2008, pp. 67–74.
- LENGYEL, I. Verseny és területi fejlődés: Térségek versenyképessége Magyarországon. Szeged: JATEPress, 2003.
- PALKOVITS, I. Szempontok a területi versenyképesség értelmezéséhez. In *Tér és Társadalom*, 2000, Nr. 2–3. pp. 119–128.
- SZIRMAI, V., VÁRADI, Zs. A várostérségi társadalmak versenyképesség-felfogása. In SZIRMAI, V. (ed.) *A* várostérségi versenyképesség társadalmi tényezői. Budapest-Pécs: Dialóg Campus, 2009, pp. 185–190.

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