

The Opportunities of Small and Medium-Sized Cities in the Globalizing World

Zoltán Birkner

University of Pannonia, Hungary

Tivadar Máhr

University of Pannonia, Hungary

Nora Rodek Berkes

University of Pannonia, Hungary

Abstract

Most researchers prefer to analyse the competitiveness and innovativeness of metropolitan areas. In this study we have the intention to characterize the small- and medium-sized cities in the Central and Eastern European region, as well as to explore their possible development path. We believe that one of the ways for developing these cities is to strengthen the innovation capabilities that means on one hand increasing the innovation performance of the operators, on the other hand, the new ways of interactions between other organizations to tackle social problems. The theoretical starting point is the interpretation and presentation of the micropolitan regions, as well as understanding the concept of technological and social innovation. As the result of the research, the innovation measurements carried out in some of the settlements will be represented. These experiences can help the small and medium-sized cities to be able to keep up with the global competition, cancel migration and the erosion of the intellectual potential.

Keywords: micropolitan region, technological and social innovation, innovation, competition

JEL classification: O3, O35

Introduction

Do small and medium-sized towns have a future in the Central-Eastern European region? Does it make sense to compile urban- and economy-development strategies and establish relations for the sake of accessing subsidies, or do we have to accept the fact that in the 21st century only large centres have the chance of a serious development? It would be an easy task to quickly answer these questions, as it is easy to reason into both directions. We believe that many processes influence, and the exodus of the youth into centres, and capitols and cities become the centres of economy, traffic and knowledge, but local players are more and more self-confident on the areas of innovation and prevailing, which are answers to processes of centralisation. The present essay wishes to present two surveys conducted in the micropolitan region in Central-Eastern Europe which have the measurement of innovation abilities of enterprises in their focus. Why are these surveys important? The authors believe that only those regions prevail in the competition where there are interesting and novel workplaces offering high salaries and which are about the future and innovativeness and the ability to renew are inevitable for all this. During the survey the innovation areas, connection systems and the role of local tertiary educational institutions and the appearance of

technological and social innovation at municipalities and enterprises was researched. The basic hypothesis said that the enterprises of the researched are (small and medium-sized towns in West-Hungary) have an average renewal ability and their environment is not remarkable from the point of innovation – there are no large universities in these towns – therefore the future of this region is uncertain and it will lag behind in the competition. Quantitative and qualitative research was conducted with enterprises being in the focus and the first survey was about general innovative abilities, but the attention shifted more and more to the renewal abilities of the environment and the relation systems. The authors do not wish to present all details of the conducted survey, but to highlight those results which justify, or doubt the hypothesis.

Theoretical background

ESPON researches (2013) investigate 32 countries in Europe and define small and medium-sized towns as entities with a population density between 300 and 1500 inhabitants/km² and a number of inhabitants between 500 and 50 000. A part of the researchers defines small and medium-sized towns on the basis of the number of inhabitants (Balchin–Bull 1987, Clark 2000, Korcelli 2000, Benedek 2006). Of course the definition can be based on the functionality, the regional role, economic activity and development, but the present researches consider the number of inhabitants as the foundation and the researched settlements belong to the category of small and medium-sized towns in the West-Hungarian region and their population characteristically ranges between 10 000-50 000 people and vocational literature calls it a micropolitan region (OMB, 2000; Eurostat, 2005; Lukovics, 2008).

Urban development in Central-Eastern Europe shows a unique development path in within Europe (Enyedi 1998). From the point of view of the settlement network it is a major feature that there is a dominance of cities (especially of capitals) and there are no real counter-poles. The Green Book of the European Union on territorial cohesion calls small (and medium-sized) towns as “links” which have all the features that can be expected from as basic functions of a town: they provide the basic criteria of living, but at the same time they are also a link between cities and surrounding villages (Horeczki, 2016, pp. 255-256).

The need to improve the competitiveness of rural, micropolitan regions is arising more and more in Central-Eastern-European countries ruled by their capitals, as the majority of the population (often 50%) is living in this environment and there is a large number of enterprises. The focus of innovation research is shifting towards local players and the unsuccessful Lisbon Strategy (innovation development of large companies, national programs) showed the necessity of a new, bottom-up innovation model (interpretable in a local space – on the level of municipalities and aimed at developing SMEs). Innovation is according to the literature the ability of doing things in another way (Schumpeter, 1939), a change which unveils a new dimension of performance (Drucker 2003), or an implemented creative idea (Karlsson-Johansson 2004). Vecsenyi (2003) believes that innovation is nothing else, but a recognised and exploited business possibility. The OECD and EUROSTAT developed a Community Innovation Survey – CIS for the sake of the measurability of innovation. The terms used in the survey are based on the descriptions of the Oslo Manual (third edition), thus their interpretation is unified: „Innovation is the introduction of a new, or greatly improved product (service, or good), or process, new marketing method, or new organisational method into the business practice, the work-place organisation, or the external relations”. (Oslo Manual, 2005, p. 30). The CIS is the only harmonised data-source of measuring innovation (Szunyogh,

2010), which is used by many authors (Leeuwen et al., 2009; Markov-Dobrinsky, 2009; Birkner-Mahr 2016). This questionnaire was used as the basis during the quantitative research.

Regionalism is an integral part of innovation processes (Gál, 2013), as there are big differences because of the regional disparity of the access to knowledge (Vas-Bajmócy 2012). The regional/territorial innovation system involves universities, research institutions, innovative enterprises as well as their activities and relations to be offer-elements. The environment (culture, education, self-government, non-governmental sphere, media) is another important element framing the existence of innovation and their unit can be called social innovation which has the primary aim of social well-being - Mulgan et al 2007.

The EU puts a special emphasis on research, development and innovation and the bolstering of the socio-economic utilisation of the relevant results in its planning period 2014-2020. It is therefore important that all regional units elaborate their own research and innovation strategies in close cooperation with each other (specification – S3). S3 and regional development can strengthen the processes tied and not tied to a place for the sake of economic development and a higher life-quality. In the course of the second qualitative investigation institutions involved into the new innovation strategy, the S3, in the afore-mentioned micropolitan regions were addresses with interview questions.

Methodology

Research 1

The first major entrepreneurial innovation was conducted in 2009 and in the frame of that a county of the West-Transdanubian region (NUTS 3), Zala county, was researched. (Birkner, 2010, pp 111-114). There are only small towns in the county and there are seven classical micropolitan regions. The research is important as so far there were no other researches of that width and importance conducted in Hungarian counties. The objective was to learn about factors affecting entrepreneurial innovation, i.e. the demands. The present services and future plans, as well as the existing relations to enterprises of innovation providers were measured. In the course of the quantitative and quality research 213 questionnaires were elaborated and 14 interviews were used to deeper unveil the problems. The research was representative.

Results

Any occurrence of the process, product organisational and marketing innovation was considered as a result of entrepreneurial innovation. The cluster analysis conducted along the parameters resulted in three groups with strikingly different sizes. The first group was made of those dropping behind (158 companies) who had hardly any R+D activities and even less readiness for innovation. There is a small layer of mostly Hungarian owned small entrepreneurial region (45 companies) who are open to innovation to novelties because of their own strength and the improvement of their competitiveness. There was also a group of large enterprises with enough capital interested in R+D, but who were rather following when it came to innovation (10 companies). The results at that time were about the Hungarian average, i.e. 26% of the enterprises participating in the survey were doing some innovation activities.

There was no close tie between the regional arrangement of R+D innovative providers and the enterprises of the given small and medium-sized towns. This could

be explained with the lack of a major innovation institution (university, research centre, technopolis, scientific and technology park) and the improper cooperation.

The qualitative research showed that the county-level R+D innovation service providers are multi-faceted organisations who are also active on the field of renovation. They did not properly indulge in the possibilities of innovation services and they were not exactly familiar with needs, therefore the harmony between the needs and demands could not be shown, meaning that service providers offered something else than companies were looking for.

The events helped to improve the innovation possibilities of enterprises in the county. Informing the service providers was considered to be the best practical step, as the real demands of companies had to be learned. Another important step was the support of the cooperation between tertiary educational institutions and enterprises and the attention of mediating organisations had to be drawn to the fact that the companies involved are not familiar with the existing research capacity in the tertiary educational sector. The grouping of enterprises bears the chance of targeted developments; the satisfaction of the needs of "innovators" and "followers" helped the case of innovation also in this county (Birkner, 2010, pp 111-114).

Methodology

Research 2

In the summer of 2015 another innovation research was conducted in the West-Transdanubian micropolitan region and three small and medium-sized towns were selected from two counties (NUTS 3) (Birkner-Mahr, 2016, pp.) Compared to the previous research, this time no entire counties were researched and more target-oriented questions were asked, as the research was aimed at questioning the individuals involved by the S3 areas (automotive industry, touristic enterprises. The question was asked whether the innovation charisma of a major university (the Pannonian University) can be seen in the above mentioned three towns irrespective of the fact that major development centre of the university is not located in the towns (but there are campuses and departments here). In the course of the research the social and economic systems supporting the innovation chances of companies and thus the criteria of social innovation was also dealt with indirectly.

A total of 51 organisations were addressed, 31 were operating in medium-sized towns and 10-10 in small towns respectively. The companies were randomly selected and sampled (from the mentioned branches), and the measuring was mainly done by structured interviews. The data were collected during the summer and early spring of 2015.

Results

The innovation performance of entrepreneurs in all three towns was – despite minor differences – around the Hungarian average (30%), thus the size of the town did not influence the renewal ability of enterprises. The Hungarian average is a draw-back compared to developed West-European regions, thus it is worth to continue the search and identification of enterprises willing to think in another ways in all three regions. How can the spreading of innovation be accelerated at the companies? The authors believe that there are two ways; one is the finding of strong, innovative enterprises within the branches/service sectors who are trying to reach global levels, or who can be made suitable for supplier levels. Companies who successfully renew become examples for others. On the other hand it is necessary to develop the tertiary education and research portfolios as the existing university capacities did not

have a major impact on the innovation performance of companies. (Birkner-Mahr, 2016, pp 47-49).

Cities must strive to establish a much more complex cooperation system than the present one as civic organisations, the bureaucracy and the educational and cultural systems can greatly support the innovative possibilities of enterprises. If only the attractiveness of a municipality for a young person/group is regarded, then it is easy to realise that an impulsive, free and creating community is important and its creation is a common task. Therefore it was suggested that the self-government of the given towns create regular meetings between employers and educational and cultural institutions where the participants receive the chance to formulate the social aspects of creativity and liveability together with the self-governments.

The question of the lack of various experts (ranging from craftsmen to people with tertiary education) was one of the first questions to be raised. One of the possible regional solution to this problem can be the launching of dual education programs on secondary and tertiary levels (long practical periods – even up to 50% - during the trainings). The obvious use of dual programs apart from practical information is the established relation between the youth and the enterprises which supports the In situ remaining. The other chance is the striking raise of loans and this is a Hungarian (even Central-Eastern European) affair and creating the necessary resources is one of the major political and economic tasks and without this it is impossible that a part of young employees seek their well-being in Hungary. An innovation bolstering without young people open to new technologies is hard.

There are many tasks for university organisations (campuses, faculties) like sharing knowledge, building paths of trust, organising vocational meetings and launching dual trainings and providing spaces of innovation. The municipalities are in a fortunate position that the all three campuses/faculties are working within the framework of the same university and therefore it is easier to harmonise arising development needs and to find common methods which can be applied anywhere (Birkner-Mahr, 2016, pp. 47-49).

Conclusion

The most important lesson of the two researches was that the innovation performance of the enterprises in the region could not be raised significantly, as the companies demonstrated results around the national average. Practical suggestions were formulated after the measurements conducted 2009 which were not accepted by regional actors. If this is the case then the region will be a part of the losing side and this will be felt the mostly by the fact that young people will leave these municipalities. It can generally be said that the tertiary educational capacities developed to a certain extent, but this did not have a positive impact from the point of view of enterprises, however this has to be dealt with in the future as knowledge and the sharing of it are the most important bases of innovation.

The researches were new, as the features of local SMEs were investigated 2009 at a time when this was scientifically not typical. The time between the two measurements did not result in changes in the scientific practice of innovation (this was observed in the approach of the two researches), the diffuse organisations considered to be important disappeared from the research focus and it became evident that institutions supporting enterprises, e.g. the Chambers are not able to generate serious innovations by themselves. It is evident that the environment, i.e. the educational, leisure-time and public administration institutions (and also the Chambers) have a major impact on establishing the creative atmosphere. This means that local politics must put a lot of energy into establishing the cooperation

among the above mentioned protagonists, the aim is liveability and restoration and the creation of a young atmosphere and if this does not happen, then modern enterprises do not appear in the given region and the mental potential will deteriorate.

It can be confirmed that the hypothesis is correct, i.e. the enterprises in the investigated area (small and medium sized towns in West-Hungary) have an average renewal ability, their environment is not striking from the point of view of innovation, thus the future of this region is uncertain and it will most probably fall behind in the competition. Based on the results the processes helping the spreading of innovation must be assisted and further individual ideas are necessary which can be interpreted in this region.

References

1. Balchin, P. N., Bull, G. H. (1987), *Regional and Urban Economics*, Harper & Row, London.
2. Benedek J. (2006), "A Romániai urbanizáció jellegzetességei az utolsó évszázad során", In: Győri R. – Hajdú Z. (szerk.): *Kárpát-medence, Települések, tájak, régiók, térstruktúrák*. MTA RKK – Dialóg Campus Kiadó, Pécs-Budapest, pp. 77–102.
3. Birkner, Z. – Máhr, T. (2016), "Interpreting innovation – in another way", *Vezetéstudomány*, Vol. 47 No. 10, pp. 39-50.
4. Birkner Z. (2010), *Zala megyében is az innováció a siker motorja? Doktori disszertáció*, Pannon Egyetem, Gazdálkodás- és Szervezéstudományok Doktori Iskola, Veszprém
5. Clark, P. (2000), "The Cambridge Urban History of Britain", Volume II, Cambridge University Press, pp. 425–476.
6. Community Innovation Survey (2007-2012), available at: <http://ec.europa.eu/eurostat/web/microdata/community-innovation-survey> (11 March 2017)
7. Drucker, P. F. (2003), "Az innováció lehetőségei", *Harvard Business manager*, Vol. 5-6, pp. 28-34.
8. Enyedi Gy. (1998), *Social Change and Urban Restructuring in Central Europe*, Akadémiai kiadó, Budapest.
9. Eurostat (2005), *Urbánus-rurális lehatárolási küszöbszámok néhány országban*.
10. Gál Z. (2013), *Az innovációs kormányzás szakpolitikai vetületei – Az innováció központi és regionális irányítása Magyarországon*, In: *Innovációbarát kormányzás Magyarországon*, szerk. Gál Z., 2013, pp 59-103.
11. Horeczki R. (2016), *Kelet-európai kisvárosok fejlődési tendenciáinak értékelése a XX. Században*, In: Lengyel I. – Nagy B. (szerk.) *Térségek versenyképessége, intelligens szakosodása és újraiparosodása*, JATEPress, Szeged, pp. 255–271.
12. Karlsson C., Johansson B. (2004), *Towards a Dynamic Theory for the Spatial Knowledge Economy*, The Royal Institute of technology Centre of Excellence for studies in Science and Innovation.
13. Korcelli, P. (2000), "The Polish urban system: stability and change, Experience of the 1990s", In Horváth Gy. (ed.), *Regions and Cities in the Global World*. Pécs, Centre for Regional Studies, pp. 159–175.
14. Leeuwen, G. et. al. (2009), *Productivity Effects of Innovation Modes: Work in Progress*, Statistics Netherland Working Paper, No. 4.
15. Lukovics M. (2008), *Térségek versenyképességének mérése*, JATEPress, Szeged, pp. 32-90.
16. Markov, N., Dobrinsky, R. (2009), *Innovation and Firm Performance in Bulgaria: Some First Empirical Results*.
17. Mulgan, G., Tucker, S., Rushanara, A., Sanders, B. (2007), *Social innovation – What it is, why it matters and how it can be accelerated?* Said Business School, University of Oxford; Oxford.

18. Oslo Manual Guidelines for Collecting and Interpreting Innovation Data (2005), available at: <http://www.oecd.org/sti/inno/oslomanualguidelinesforcollectingandinterpretinginnovationdata3rdedition.htm> (13 February 2017)
19. OMB (2000), Standards for Defining Metropolitan and Micropolitan Statistical Areas, Federal Register, Office of Management and Budget, No. 249, pp. 82228-82238.
20. Schumpeter, J. A. (1939), Theory of Economic Development, Cambridge, MA, Harvard University Press.
21. Szunyogh Z. (2010), Az innováció mérésének módszertani kérdései, Statisztikai Szemle, Vol. 88 No. 5, pp. 499-502.
22. Vas Z., Bajmócy, Z. (2012), Az innovációs rendszerek 25 éve, Közgazdasági Szemle, LI X, Évf, pp. 1233–1256.
23. Vecsenyi, J. (2003), Vállalkozás - Az ötlettől az újrakezdésig, Aula, Budapest.

About the authors

Zoltán Birkner, PhD is an associate professor at University of Pannonia Nagykanizsa Campus, a research specialist in the field of innovation performance of companies and regions and the manager of a water technology research and development center. Author can be contacted at birkner.zoltan@uni-pen.hu.

Tivadar Máhr is an active settlement development specialists, a tourism and innovation expert, the deputy mayor of a highlighted touristic destination and PhD student in Management and Business Administration at the Doctoral School of University of Pannonia. Author can be contacted at mahrtivadar@gmail.com.

Nora Rodek Berkes is a lecturer at University of Pannonia Nagykanizsa Campus. She is a PhD student in Management and Business Administration at the Doctoral School of University of Pannonia. Her research topics are CSR (Corporate Social Responsibility), sustainable and responsible management, social innovation. Author can be contacted at rodek.nora@gmail.com.