

## **Analysis of capitals of endogenous development from a rural aspect**

*Gábor BODNÁR*

Endogenous development is a rather complex concept, especially when compared to endogenous growth. This makes sense, because social welfare has several different interpretations and can be defined by qualitative measures in contrast to growth with its typically quantitative features. This, of course, does not mean that my work will not take quantitative analysis into consideration.

After the review of major processes of countryside and the delimitation of rural areas I intend to highlight the role of various types of capital and their spatial structure by using multidimensional analysis. This method helps measuring and comparing different territorial units and their level of tenure of each capital.

*Keywords: rural areas, endogenous development, multivariate data analysis*

## **The role of agglomeration economies and technological relatedness in the growth of Hungarian regions and firm survival**

*Zoltán ELEKES – Sándor JUHÁSZ*

Recent results in evolutionary economic geography suggest that it is not the variety or specialization of economic activities in itself, that drives regional growth, but the presence of technologically related industries, and inter-industry knowledge spillovers that might follow. The goal of our present paper is to link the arguments for related variety with the particularities of the Hungarian transition economy. We argue that the widely used measures of related variety can be applied to the dual structure of the economy, coming from the technological gap between foreign-owned and domestic firms. We formulate an empirical research design based on this, which will be used in the next stage of the research. With this we aim to contribute to the broader research on how agglomeration economies, extra-regional trade linkages and FDI linkages affect regional employment growth and firm survival in a transition economy setting.

*Keywords: agglomeration economies, related variety, regional growth, firm survival*

## **Qualitative approaches for analysis of industrial knowledge base**

*János GYURKOVICS – Zsófia VAS*

Latest researches that investigate the creation, diffusion and utilisation of economically useful knowledge go beyond questions like how much resources need to be invested in innovation activities by companies and what the result of these investments are. The objects of analysis have been shifted to issues like how innovation activities actually take place at firm level and what kind of different characteristics could be observed in innovation activities and results of firms, sectors and regions. The differentiated knowledge base approach is one of the most commonly used frameworks to answer these questions. It takes into consideration industrial and spatial characteristics simultaneously.

The aim of this study is to investigate how the differences in innovation and economic performance of firms (industries) and regions can be studied with the use of industry specific knowledge. In the present paper we focus on qualitative researches. In the literature several measurement methods have been used to capture industrial knowledge bases mostly with the aim to understand better the differences in innovation patterns of firms and regions. The main message of the reviewed studies is that the combination of different knowledge bases and the unique characteristics of regions have significant influence on the innovation and economic performance.

*Keywords: industrial knowledge base, innovation performance, qualitative research methods*

## **Small towns' developmental path in Eastern-Europe**

*Réka HORECZKI*

Nowadays one of the most important topics of the EU regional policy is the development of town and metropolitan regions. At the same time, small towns play a more important role than ever in local development. The study aims to present the long-term development trends and characteristic features of small towns. These entities strongly influence the economic, social and political life of Eastern and Central-Europe. My paper applies the methodology of comparison; it investigates primarily the development and opportunities of countries with significant small town network having similar assets and structures. It is obvious that there are several countries among the successor states of the Austro-Hungarian Empire where the development of small towns was an important perspective from the aspect of societal, economic

and political evolution (for example: see the birth of conservative values, small-town-mentality, local patriotism, and landlordism). Regarding the analyzed regions identical urban development paths are discernible. The factors which have relevant impacts on small town development potentials are: the geographic position, the historical development, and the emergence of civil society. Beside these aspects, local traditions, practices, special age-long agricultural activities, specialized knowledge or economic attitude (small firm production possibilities, special horticultural activities) are also relevant features.

*Keywords: settlement network, small towns, Eastern-Europe, urbanization*

## **Attraction of cities in national and regional scale**

*Zoltán KOLTAI*

We conducted a layered questionnaire survey in 2004-2005. In the research one thousand private persons responded to our questions. We wanted to find the answer to the following questions: what aspects do Hungarian citizens prefer when choosing their place of residence, what characteristics 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 and how much are the respondents willing to move to another settlement?

In the light of the results, we repeated our survey in 2012-2013, allowing thereby the comprehensive evaluation of a period of almost ten years. In the second survey 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 level of education), in which it was one thousand private persons again who responded to our questions. In this study we report the results of the analysis of these surveys with respect to locational appeal and settlement competitiveness.

*Keywords: attraction, competitiveness, city, region*

## **Measuring of local economic impact of University of Szeged and University of Lorraine**

*Balázs KOTOSZ – Marie-France GAUNARD-ANDERSON – Miklós LUKOVICS*

While measuring the impact of higher education institutions on local economy dates back to the 1970s, until now it has not led to a uniform methodology, which could produce spatially comparable results. Some of the landmark works attempted to synthesize theoretical results, but we cannot find papers in the literature that compare universities in different countries with the same methodology. The typical scientific work is a case study about the workplace of the author(s). Our study is groundbreaking in this respect, the research has been conducted into the effects of a Hungarian (University of Szeged, Szeged) and a French (University of Lorraine, Metz) higher education institution; and compares them based on the exact same model.

During the measurement, a multiplier-based model was used, which utilized primary data whenever it was available. The method is able to summarize the impacts of the first two missions of higher education institutions (education and scientific research). The results obtained stress that these missions cannot add to the economic performance of the region more than funding of the university's operation by the (national or local) government; in other words, their value added is very limited. This statement makes it particularly important that the effects of the universities' third mission (more or less identified and managed) should be considered.

*Keywords: impact study, University of Szeged, University of Lorraine*

## **Missions of universities and local economic impact: methodological challenges and possible solutions**

*Balázs KOTOSZ – Miklós LUKOVICS – Bence ZUTI – Gabriella MOLNÁR*

Nowadays the presence of a university creates value in a great number of dimensions. It creates value in the region in which the university is located, and its impacts on local economic development are being increasingly recognized. This phenomenon creates a need for research that focuses on the economic impact of these institutions. There are several existing methodologies regarding the measurement of economic impact but these methods generally differ to a smaller or greater degree. These differences make the comparison of analyzed institutions and results quite challenging.

The first dilemma is the difference in the definitions. It is important to clarify how we define the missions of universities and how we differentiate between the

various types of impacts of universities. A further difficulty is that in the literature we can find studies that use the term “third generation of universities” interchangeably with the term “third mission of universities”, although the two concepts are not the same. The quantification and comparison of university impacts gets even more complex when considering the fact that the indicators that are used to measure the third mission are different among universities and the quantification greatly relies on estimations as well. In the current study, we will clarify the most significant definitions, controversies and we will propose a methodology that can be used to quantify the economic impact of universities in case of Hungary.

*Keywords: impact assessment, universities, economic impact*

## **Public finances and the public good**

*Árpád KOVÁCS*

The timeless, mobilising fundamental motif of human society is the pursuit of „public good”. The expression became one of the important buzzword of our life. Its prevalence in finances is undergoing some changes reflecting the changes of its content both in space and time; primarily as regards the principles, values and value transferring goals, as well as its practical, financing solutions. Following some theoretical and conceptual considerations the paper examines the positions of Hungarian budgetary policy also from this respect. It was seeking answers to how this concept can be interpreted, what is its relation to social-economic expectations, governmental expectations and the functioning of sustainable public finance. The paper wishes to prove that even though the endeavours to realize public good that is reflected also in the budget might change in space and time, from country to country and by federal systems the essential condition of its implementation is to create a dynamic balance of fiscal stability and social-economic development so that social entitlements also existed. The paper examines the present processes of the functioning of Hungarian public finance also from this aspect.

*Keywords: fiscal policy, crisis management, debt management*

## **Expectations and innovation in the European Union: relations, processes, and impacts**

*Renáta LACZI – András LONDON – Anita PELLE – Marcell Zoltán VÉGH*

Innovation typically results from investments into research and development activities. Such investments in the 21<sup>st</sup> century are typically large in size, cover a long

term and are, at the same time, risky. Knowledge-intensive investments aim at generating and utilising new knowledge but they also build on existing knowledge. In developed economies, such investments are financed jointly by the business, government and higher education sectors. As for the European Union, the more developed a member state, the more likely we find a larger share of the business sector in research and development investments. Business expenditure on research and development can be fostered by the improvement of the business environment.

Besides research and innovation, education is one of the elements of the knowledge triangle; these together ensure the conditions of a competitive, innovation-driven, modern, knowledge-based economy. The most successful innovator economies of the EU and the world put a large emphasis on the quality and efficiency of their education systems, and quantity dimensions also matter. An educational policy with such orientations sends important signals to market actors planning to undertake investment in research and development. For the investor, the (lack of) stability of the political-economic-legal environment also appears as a risk. Therefore, general expectations in relation to a certain country play a role at decisions on investment in research and development.

In our study, we focus on these relations, processes, and impacts.

*Keywords: expectations, research and development, innovation, education, European Union*

## **Some aspects of the competitiveness of Hungarian counties on the basis of the renewed pyramid model**

*Imre LENGYEL*

Regional competitiveness has now become a key term of both scientific analyses and economic development policies. Over the past years, global transformation and the crisis have both affected the interpretation and measuring of competitiveness. In our paper, we review the new trends of the interpretation of the concept and present the renewed pyramid model, revised on the basis of literature findings and founded on an endogenous development approach. We apply and test this new model on the analysis of the competitiveness of Hungarian counties, by using an empirical database and multivariate statistical methods.

*Keywords: regional competitiveness, pyramid model, endogenous regional development*

## **Responsible innovation in South-East European countries**

*Miklós LUKOVICS – Norbert BUZÁS – Jessica HUNTINGFORD – Gabriella MOLNÁR*

Recently the concept of Responsible Research and Innovation (RRI) is a well-noted policy of the European Union. The concept is related to sustainability, RRI can be interpreted as sustainability from the point of view of innovation. Despite the fact that responsible research and innovation is becoming an increasingly integral part of scientific research, in transition economies including a number of South East European countries this is still a relatively new concept. On a theoretical level RRI is considered a developed topic, but the interpretation and its practical utilization is an important task in the future.

Based on the results of a large-scaled primary survey, the goal of the study is to present the challenges of a specific geographical area arising in complex, changing innovation environment in the South East European countries. We are examining the characteristics of this area related to responsible innovation and the best pilot actions, which can serve as a benchmark model for regions represented by similar parameters to the first steps of the practical implementation of responsible innovation.

*Keywords: responsible innovation, South East Europe, raising awareness, pilot project, RRI implementation*

## **Studying familiness with grounded theory method. Case study of a small family business**

*Éva MÁLOVICS – Gergely FARKAS*

Our research is a part of a bigger study about the connections of culture, knowledge sharing and innovation in family and non-family entrepreneurship. This paper shows the results of interviews with couples as owners of a family business. The analysis of the interviews was conducted using grounded theory method. We discovered the most important dimensions of familiness and its relationships with stewardship view in this entrepreneurship. In the investigated business the main values are loyalty and trust, which were preferred to professional knowledge.

*Keywords: familiness, succession, knowledge sharing, stewardship*

## **An alternative for development based on the ecosystem services of continuous cover forestry**

*Zsuzsanna MARJAINÉ SZERÉNYI – Gábor HARANGOZÓ – Péter CSÉPÁNYI – Eszter KOVÁCS*

Forestry plays a key role in the economy and competitiveness of less industrialized regions in Hungary. Traditionally the major silvicultural system is the conventional rotation forest management, however, the more nature-friendly continuous cover forestry is also present. The economic potential of the continuous cover forestry (in comparison to the rotation forest management) has been debated for a long time. Continuous cover forests, however, seem to offer a wide range of ecosystem services that might not raise significant income for the forest management in a narrower sense, but still generate benefits for the society. Currently these ecosystem services and benefits are often disregarded, even though the forest-environmental payment scheme offers subsidies to promote continuous cover forestry. In this paper we compare (1) the profitability and (2) using the concept of ecosystem services, the non-market social benefits of the continuous cover forestry and the rotation forest management systems. Based on our results we also show the opportunities to increase the use of the continuous cover forestry (as a nature-friendly mode of forest management) and thus improve the competitiveness of rural areas in Hungary.

*Keywords: ecosystem services, continuous cover forestry (CCF), economic value, silvicultural system.*

## **The evolution of the Hungarian manufacturing sector between 2008 and 2013: reindustrialization or spatial restructuring**

*Benedek NAGY*

The Hungarian economy has organically integrated into the global economy starting after the change of the regime in 1990 through privatization then subsequently with the accession to the EU in 2004. This integration also affected the manufacturing industry where foreign direct investment started to play an increasingly important role and helped increasing the share of export. This process was interrupted by the crisis of 2008 which sharply set back the manufacturing production in Hungary as well.

In our study we investigate how the manufacturing sector in Hungary changed in the aftermath of the global financial crisis. We are examining how the manufacturing sector evolves in different regions of Hungary, and also how the composition of the manufacturing sector changes using employment and gross value added (GVA) data. We also link domestic investments and the incoming foreign direct in-



vestment to these changes, these factors being important determinants of the regional development and the development of manufacturing itself. We investigate how investments change in the years 2009–2013 in the regions being successful and less successful in increasing manufacturing employment.

*Keywords: manufacturing, structural change, regional development, labor productivity*

## **Meso-spaces in society and the economy**

*József NEMES NAGY*

This paper investigates issues concerning the opportunities of analysing various characteristics of spatial units situated between the local and national scales as well as their role in governance. We study the notion of meso-spaces and that of the region, the issue of scalar hierarchies, the scaledebate, the main features of meso-spaces, the relation of meso-spaces to spaces at other scales, and changes in this relation. The main geographical scales are analysed disaggregated to their constituting units and in terms of space-shaping factors beyond those of sizeparameters. Addressing the topic of regional analysis we draw attention to some critical methodological issues in quantitative spatial analysis. From the point of view of regional governance and regional policy the article investigates the fluctuations of centralising and de-centralising means in governance as well as their implications in light of current Hungarian tendencies.

*Keywords: regional analysis, regional policy, division of space, regions*

## **The Model of Győr – Dimensions of co-operation between the academic, industrial and local governmental actors**

*János RECHNITZER – Petra KECSKÉS – Adrienn REISINGER*

The main aim of the study is to give an overview of the emergence of the Triple Helix Model in Győr, a regional centre and identifies the milestones of its renewal. The key factor of the city's economy is the automotive industry. After introducing the conceptual theoretical framework of the Triple Helix Model focusing on the university's role, the authors will highlight the city's economy as a whole. The study will be continued by the characterization of the three pillars in the Model. First, the industrial part of the Model will be introduced which gives review of the automotive industry and its role in the city. The second pillar of the Model is the university – in the case of Győr, the role of Széchenyi István University will be emphasized. The

third element of the Model is the city's government which grants the framework to the infrastructure, movements and flow in the system of the Model and its actors. Finally, the study provides a critical approach related to the Model of Győr and presents some suggestions to its further improvements and implications.

*Keywords: Triple Helix model, economic development, dimensions of co-operation*

## **The emergence of new terminologies in regional studies and regional policy in Hungary**

*Pál SZABÓ – Balázs István TÓTH*

From time to time, new and novel research topics and expressions established in the international (mainly Anglo-Saxon) scientific literature emerge in the Hungarian regional science. Parallel with this, regional policies abroad and in Hungary continuously made attempts to take over and apply new or novel thoughts and ideas. The paper focuses on the appearance and transmission of four recently emerged terminologies (territorial competitiveness, territorial cohesion, territorial capital, regional resilience) as well as points out the integration of these terms in Hungarian regional studies and regional policy. The results highlight that these phenomena are actually not new, but can be regarded as novel schemes of familiar contents. The reason of this situation may be regarded in the way scientist conceptualise the changing notions and understanding of both economic and social phenomena in spatial and territorial contexts. The paper also highlights that regional policies in the European Union and in Hungary managed to apply the new terms in some cases. In fact, a more modest integration of terms can be observed in the context of Hungarian regional studies and regional policy, which is not unconditionally useful for a common thinking and view about regional issues.

*Keywords: regional studies, regional policy, territorial competitiveness, territorial cohesion, territorial capital, regional resilience*

## **Examination of Hungarian small companies' competitiveness in regional comparison**

*László SZERB – Miklós HORNYÁK*

Research papers in the field of SMEs have been rare in the past few years, therefore our knowledge is not up to date on the sector, which employs 70% of the workforce in business sphere and which provides 50% of added value. In this paper, we present the (NUTS 2 level) regional differences of competitiveness of SMEs with the help

of an index (KVI-Index for SME Competitiveness) based on a layered, representative 809 patterns. The Serb et al (2014) model was developed to define the Index for SME competitiveness to measure the achievement of Hungarian firms in ten dimensions. As opposed to expectations, the competitive value of less developed regions was higher than that of more developed ones. The complex competitive values of SMEs in bigger settlements were lower in the examined period between 2010–2013 than in smaller settlements, that is to say that the disadvantages of their marginal position in the agglomeration is partly compensated by their better individual achievement. Behind this increase, no territorial reasons could be detected. Results should be handled with caution since neither institutional, infrastructural nor production effectiveness were studied. Similarly, the 2010–2013 period might not have been representative either, since there were significant changes in leadership as well as in restructuring of firms that may also had an impact on individual competitiveness and achievement.

*Keywords: SME competitiveness, regional competitiveness*

## **The effect of foreign working capital on the economy of the Southern Great Hungarian Plain in particular the border regions**

*Gabriella SZÓNOKYNE ANCSIN*

During and prior to the Yugoslav War, economic actors from Vojvodina were striving to transfer their capital to Hungary, in particular to the border regions of the Southern Great Hungarian Plain. Most of these enterprises which were relocated almost 25 years ago have become successful beyond border regions as well and have turned into driving forces and innovative investments of the region. At the end of the 20<sup>th</sup> century the business world was uncharted territory in Hungary. Besides setting an example, foreign investments from Yugoslavia served as beginner's guides for inexperienced Hungarian entrepreneurs. As a center of foreign enterprises, Szeged has grown into an innovative business capital. The paper illustrates the dispersion of foreign working capital and its regional effects and discusses some ongoing processes leading up to the present day.

*Keywords: migration, refugee, border region, foreign capital, enterprise*

## **"Rebirth" of industrial policy in the European Union member states**

*Ádám TÖRÖK – Gyöngyi CSUKA – Anita VERES*

The aim of this study is to demonstrate how the industrial policy of the European Union has been transformed in the period between 1957 and the first decade of the 21st century, from the year of the establishment of the European Economic Community until the "rebirth" of its industrial policy. During the research we examined how different, country-specific industrial policy solutions could fit into the EU's overall economic policy framework. What are the impacts of those industrial policy solutions on the development of the industrial policies of the Central and Eastern European countries?

*Keywords: industrial policy, manufacturing, competitiveness, Central and Eastern Europe*

## **The spatial inequalities in growth opportunities of small and medium sized enterprises**

*Ákos TÓTH-PAJOR – Richárd FARKAS*

In this paper we intend to identify the drivers of spatial inequalities regarding the growth opportunities of small and medium sized enterprises. These enterprises are active members of the regional economic community, and the spatial inequalities in their growth opportunities can be considered as a well-established indicator of the differences in the regional competitiveness. The regional entrepreneurship ecosystems can generate positive externalities, which cannot be measured in an exact way, only the aggregate effect can be built into models through different proxy measures. One of the indicators concerning the aggregate impact of these externalities is the concentration of the high growth small and medium sized enterprises in the region.

This paper investigates the question whether the high growth small and medium size enterprises show spatial concentration in the economy. The results strengthen the assumptions about the concentration of high growth firms. These results can be interpreted as the indicator of the positive externalities of the regional entrepreneurship ecosystems, which can be considered as an output based performance measure concerning the entrepreneurship ecosystems.

*Keywords: Corporate Growth Opportunities, Q-Theory, Entrepreneurship Ecosystem*

## **Some competitiveness specificity about the rural agglomerations, agglomerating areas and metropolitan settlement groups**

*György VIDA*

The processes of globalization has transformed spatial functioning of the economy and society significantly. These trends caused international competition between regions and municipalities. In these processes metropolitan areas are playing an important role in economic structure of Hungary. The investigation deals with the competitiveness of the Hungarian agglomerations, agglomerating areas and metropolitan settlement groups except Budapest. In order to examine this issue I have formulated three research questions that I intend to answer by mathematical statistical methods. According to the results there are significant spatial differences among the performance of metropolitan areas. Hence one can see a strong contrast of various economic and social factors, as well as intra-regional polarization related to realized competitiveness.

*Keywords: agglomerations, agglomerating areas, metropolitan settlement groups, competitiveness*