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Conference Paper

European Regional Science: between Economy of Culture and Economy of Catastrophes (review of the ERSA 2005 Amsterdam Congress Reports)

46th Congress of the European Regional Science Association: "Enlargement, Southern Europe and the Mediterranean", August 30th - September 3rd, 2006, Volos, Greece

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Pelyasov, Alexander (2006) : European Regional Science: between Economy of Culture and Economy of Catastrophes (review of the ERSA 2005 Amsterdam Congress Reports), 46th Congress of the European Regional Science Association: "Enlargement, Southern Europe and the Mediterranean", August 30th - September 3rd, 2006, Volos, Greece, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<https://hdl.handle.net/10419/118362>

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European regional science: between economy of culture and economy of catastrophes (review of the ERSA 2005 Amsterdam Congress reports) (not assigned to any session yet) ERSA Congress can be seen as laboratory of ideas with broad representation not only European, but also scientists from US, Japan, Korea, Brazil, African and Asian countries. With very high speed new thoughts and phenomena from the European regional scientific community appear on the stages of the ERSA annual Congresses. Three new features were characteristic for the 2005 ERSA Congress in comparison with the previous ones. First, special focus on the factors of density in the regional development. That was not surprising as the meeting was held in the city of Amsterdam with the highest density in Europe where land and space are scarce goods. Second, integrative tendencies in attempt to use natural factors to explain traditional phenomena of the regional science. Issues of land and water management coincide with economic growth and regional development in many reports. Third, for the first time theme of networks and network society was embedded in many sections of the Congress and in the very title of the Congress itself. All these aspects as participants demonstrated could be positive creative factors increasing cultural assets of the European regions, efficiency of the knowledge transfer, leisure activities; or negative as the source of disaster and risk for human beings. Density factors (lack of people or lack of space?) divide European regional science into two sciences – urban for the populated regions and regional for the territories scarcely populated with very different themes, methods and tools of research. Housing markets, urban sprawl and commuting patterns are popular topics in the first case; labor markets and human capital in the second case. New Economic Geography models work smoothly in the first regions but are inappropriate in the second. Competition is harder in the labor markets of the populated regions but is softer in the regions with scattered population where it is substituted by the forces of cooperation. Contemporary regional society can be sustainable only as network society. In the reports networks were examined on different levels: a) as transportation networks in the investment national or interregional projects; b) as policentricity urban structures replacing Cristaller's hierarchy of central places; c) as public-public, public-private partnerships combining public and private stakeholders in the decision-making process. Transition of the European regions from the industrial to network/service has begun 25 years ago. Position of the concrete region on this route determines clearly the type and intensity of its problem and research agenda. The more advanced is the region or nation on this route the more often terms like “reinvent”, “rethink”, “revisited” are used in the scientific community. Rediscovery of the old concepts, definitions, essence (as Amsterdam Congress demonstrated) is very creative and challenging process of the post-industrial regional science.

1. Introduction

Each ERSA Congress can be seen as laboratory of ideas in regional science, as important landmark in the development of the field. Only a small part of the Congress papers are finding their way into the journals of Regional Science. Peter Batey, for instance, considered their number for the RSAI conferences in the 1980-s less than 10% [1].

But how not to lose the richness of variety of thoughts, ideas, and facts, delivered at the annual Congresses, for the scientific community of European regional scholars? In early 1960-s, at the adulthood period of the Regional Science, Walter Isard summarized the diverse views and points which have been presented at the European Congresses [2-6]. Maybe it is time now to return to this tradition. The number of papers has increased many times since that time, however, we are armed with computers and CD-ROMs now to overcome the burden of numbers.

In this text the author tries to give a snapshot of the papers from Amsterdam 45th Congress of the European Regional Science Association “Land Use and Water Management in a Sustainable Network Society” (23-27 August 2005). There are 486 reports at the Congress CD-ROM. Our criteria for selection the workable subset from this set of materials were the following. First, we dealt with European authors only. Amsterdam Congress because

of its water and land management focus has attracted a lot of scientists from Africa - Algeria, Burundi, Tunisia, Uganda -, as well as representatives of United States, Japan, China, Australia, Venezuela, New Zealand. Their works did not pass into our subset. Second, we examined only works on European issues. (To be more exact, special stress was made for Western European issues as scientist from Western countries dominate in the European regional science community.) Therefore if European author covered non-European subject his work did not come in our selection of papers. Third we omitted purely theoretical works without any sign of application to the European realities. And finally we decided not to include papers which was not possible to unite in cluster of at least three to five articles.

Three rounds of selection process have been undertaken. Initially we have roughly looked through all the 486 reports on the CD-ROM to determine the major topics. Then we have selected reports for these 19 topics. And at the third circle we have looked through the previously abandoned papers to let them in. This time we have decided to increase the number of topics till 21 to include some more papers. Finally we have 250 papers to be reviewed (51,4% of total set).

The sequence of topics and subtopics in our review was directed only by the number of papers. So this is very mechanical approach. But inside subtopics we tried to pass from articles with more general subjects to articles with more concrete subjects. We admit limitations of our approach – no focus on the countries, authors, no links between country and topic of author's research, between the concrete author, school of European regional thought, and the topic of research, no analysis on the division between policy-relevant and methodological papers, etc. This work deals only with subject issue.

The continuity of the further text is the following. First we give brief overview of the 248 reports in 21 topics (table 1). Then we try to reveal sometimes hidden but in spite of this very general subjects of the Congress. We conclude with seven major lessons of the Amsterdam Congress maybe helpful for the organizers of the future Congresses.

Table 1

Topic	Subtopic	Number of papers
1. Cities, urban issues	1.1. Urban dynamics (growth, sprawl, shrinkage)	7
	1.2. Old industrial cities and urban regeneration	7
	1.3. Urban networks, polycentric urban region	6
	1.4. Gated communities	4
	1.5. Modeling of urban systems and urban planning	3
	1.6. Knowledge economy and urban development	2
Total		29
2. Regional innovation system	2.1. Innovations and regional economic growth/development	6
	2.2. Knowledge spillovers	6
	2.3. Incubators and Universities as engines of innovation	3
	2.4. Modeling and measuring innovative capability	3
	2.5. Innovation policy	3
	2.6. Innovation – evidence from European regions	4
	2.7. Review of the literature	2
Total		25
3. Transport	3.1. Transport and human behavior in space	4
	3.2. Transport's impact on the regional development	3
	3.3. Effects of road pricing	3
	3.4. Spatial effects of transport policy	3
	3.5. Analyzing and modeling transport systems	2
	3.6. Regional effects of road investment	2
	3.7. New services in European transport	2
Total		19
4. Regional Growth	4.1. Contradictions of regional growth: convergence and disparities	8
	4.2. Factors of regional growth	6
	4.3. Human capital and regional economic growth	4
Total		18
5. Regional labor markets	5.1. Features of regional labor markets	8
	5.2. Supply and demand matching process on the regional labor markets	3
	5.3. Supply dynamics on the regional labor markets	3

	5.4. Gender wage gap	2
Total		16
6. Water issues	6.1. New approaches for water management	6
	6.2. Economic aspects of river flooding	3
	6.3. Modeling river floods	3
	6.4. Flood management (regional cases)	2
	6.5. Water demand management	2
Total		16
7. Tourism sector	7.1. Role of tourism in regional development	6
	7.2. Modeling tourism (local tourism markets)	4
	7.3. Tourism planning	3
	7.4. Regional problems in tourism development	3
Total		16
8. EU integration/enlargement/cohesion	8.1. Regional effects of European integration	5
	8.2. Convergence between European regions	4
	8.3. Regional competitiveness in EU	2
	8.4. Social policy in EU	2
	8.5. Links between sectoral and spatial policy/spatial development in EU	2
Total		15
9. Methodology	9.1. Location issues	6
	9.2. Methodology of regional science: calibration of old and new models	4
	9.3. Agglomeration effect	4
Total		14
10. Spatial behavior of firms	10.1. Firm migration/relocation	6
	10.2. Spatial development of new firms	4
	10.3. Firm competition	2
Total		12
11. Regional policy and planning	11.1. Spatial planning	5
	11.2. Regional policy	3
	11.3. Evaluation of the regional governance	3
Total		11
12. Housing market	12.1. Empirical studies of the regional housing markets	8
	12.2. Modeling housing markets	3
Total		11
13. Land use	13.1. Models and methods of land use analysis	5
	13.2. New approaches for land use planning	2
Total		7
14. Infrastructural projects: modeling, institutions, empirics		7
15. Border regions		7
16. Entrepreneurship and small firms		6
17. Rural households, firms, policy		5
18. Island economy		5
19. Regional dimension of migration		4
20. Foreign direct investment		4
21. Financial, investment policy		3
Total reviewed		250 papers
Total in the Amsterdam Congress		486 papers

II. Review of the Amsterdam Congress papers

1. Cities, urban issues (29¹)

Papers on the urban problems dominated absolutely and were scattered at many sessions of the Amsterdam Congress. Therefore regional science in Amsterdam looked like very urban science. This was not the case for Jyvaskyla 2003 Congress where ratio between urban and regional issues was more balanced.

1.1. Urban dynamics (growth, sprawl, shrinkage) (7)

Phenomenon of the urban growth was examined with the tool of endogenous growth model. Authors tried to link it with European integration and systems of urban governance in EU12². They stressed that the relative size of the university sector does have a highly significant role in explaining growth differences between European cities. A systematic and

¹ Here and later this is the total number of papers inside the topic/subtopic.

² Cheshire Paul, Magrini Stefano. European Urban Growth: throwing some economic light into the black box.

highly significant factor determining rates of urban population growth in EU12 is climatic variation. Cities with better weather than that of their countries have systematically tended to gain population over the past 20 years³. Other authors explored the role of city size in the growth of cities with the help of the classical theories joint with the supply-oriented dynamic approach and the city network paradigm⁴.

On the other hand, demographic depopulation in many European regions and cities provokes urban shrinkage phenomenon. (The whole process of European integration can be understood as reaction on the depopulation challenge in the core European countries). Author describes spatial effects of ‘non-growth’ and ‘shrinkage’ in the urban landscape in the city of Leipzig⁵.

Existence of two groups of cities – compact and sprawling – let some authors investigate the difference in their models of land use⁶. The other authors revealed the asymmetry between urban land expansion (20% during the period 1980-2000 for fifteen European urban areas) and population increase (only 6%). They undertook research on the relationship between urban land use development and population density development trends over the past 50 years. Compact and with lower density cities are very different from the point of view of land use patterns⁷.

Authors from Portugal, utilizing time series from 1864 to 2001, have revealed evolution of city-size hierarchy in the Portuguese urban system. Until the middle of the twentieth century urban growth was accompanied by population concentration in the largest cities; afterwards growth benefits middle size cities, reinforced in the last decades by heavy population losses in the two largest cities⁸.

1.2. Old industrial cities and urban regeneration (7)

The concept of urban regeneration has been reinvented since 1960-s. Now it is considered not only as new building construction but as a whole change in the urban environment, in the urban structures. Traditional urban renewal targeted pre-war urban neighborhoods, concentrating mainly on the construction of social rented housing and on the improvement of technical quality; new urban renewal tries to improve not just the dwellings but the whole living environment and urban structure⁹.

In many European cities structural economic changes have a tremendous impact on a city’s image, labor force and the spatial and (socio-) economic framework. The cities have to cope with consequences such as social decay, joblessness and environmental contamination. Revitalizing derelict inner city sites is essential for a sustainable urban development. Open communication, trust and cooperation between public and private stakeholders accelerate the revitalization process and lead to a balanced and mutually accepted outcome¹⁰.

Many historic cities like Genova, the largest port on the Mediterranean and one of the most important Italian cities, in recent decades experienced redevelopment for new “postindustrial uses” often related to culture, tourism, technology. Urban regeneration takes complex characteristic: in Genoa’s case it involves both the restoration of the historical centre and the whole port area¹¹.

In another paper role of station development projects in searching ways to develop a competitive service economy is examined for Rotterdam, a manufacturing and seaport city.

³ Cheshire Paul, Magrini Stefano. Population Growth in European Cities: weather matters – but only nationally.

⁴ Royuela Vicente, Surinach Jordi. Quality of life and urban size.

⁵ Haase Dagmar. Derivation of predictor variables for spatial explicit modeling of ‘urban shrinkage’ at different scales.

⁶ Frenkel Amnon, Ashkenazi Maya. Measuring Urban Sprawl. How Can We Deal With It?

⁷ Kasanko Marjo, Barredo Jose I., Lavalle Carlo, Sagris Valentina, Genovese Elisabetta. Towards urban un-sustainability in Europe? An indicator-based analysis.

⁸ Delgado Ana Paula, Godinhob Isabel Maria. Long-term evolution of the size distribution of Portuguese Cities.

⁹ Priemus Hugo. Regeneration of Dutch Urban Districts: the Role of Housing Associations.

¹⁰ Totzer Tanja, Gigler Ute. Managing urban dynamics in old industrial cities: Lessons learned on revitalising inner-city industrial sites in six European case studies.

¹¹ Galdini Rossana Urban Regeneration Process: the case of Genoa, an Example of Integrated Urban Development Approach.

The author draws a comparison with Rotterdam's rival Amsterdam, showing that differences in present economic performance and urban development are partly rooted in different economic histories¹². Another case connected with rail stations system and urban transformations is done for Naples¹³.

Conjoint analysis study was developed to assess alternative land uses for city of Venice Arsenal regeneration project¹⁴. One paper was devoted to the issue of urban restructuring for the transitional countries. The author insisted that economic decay in this case differs substantially from western counterparts¹⁵.

1.3. Urban networks, policentric urban region (6)

Polycentric Urban Region as a concept has gained in popularity among urban and regional geographers and planners since the late 1980s. They underlined that urban landscape in advanced economies transforms from monocentric cities to polycentric urban networks on regional scale.

Papers in the Congress suggested new angles for the phenomenon of urban policentricity. Several authors explore development of current "city network" paradigm¹⁶. Others suggest intellectual transition from central places to polycentric urban regions, looking at four cities which form the Randstad as nodes in one network, each has a specialization and interacts horizontally with each other by means of flows of people, goods and information. This complementarity offers the requested mass and diversity to perform as one world city¹⁷.

Dutch authors suggest three methods of planning for urban networks - node-based, density-based and accessibility based. They vote for the last in their paper¹⁸.

Can urbanization economies be organized in polycentric urban regions? This question was raised in the paper that covers the issue how cities in polycentric urban region complement each other in terms of the consumer services they host¹⁹ (complementary relationships among centers and cities).

The author in the next paper stressed the gap between research on regional polycentric urban networks and research that is being devoted to the new economic role outdoor leisure and entertainment have in urban areas. He pointed out the necessity of new (combined) research agenda²⁰.

Using the 1998 Netherlands National Travel Survey, Dutch authors developed a typology of urban, suburban, and rural municipalities located in monocentric and polycentric urban systems on the basis of dimensions of diurnal weekday variations in visitor populations²¹.

1.4. Gated communities (4)

Since the 1970s, gated communities have emerged in urban as well as suburban areas in the USA and, more recently, in European countries. There are currently few gated communities in Europe, but their number is on the increase. For instance, gated communities

¹² Trip Jacob Jan. Railway station development in post-industrial Rotterdam: path dependency and shifting priorities.

¹³ Papa Enrica. Urban transformations and rail stations system: the study case of Naples.

¹⁴ Riganti Patrizia. Public Preferences for Land uses' changes: valuing urban regeneration projects at the Venice Arsenale.

¹⁵ Suchacek Jan. Regional Decline and Restructuring in Ostrava Agglomeration and Katowice Conurbation.

¹⁶ Van der Knaap Bert, Wall Ronald. Netscape Europe and the Evolving World City Network.

¹⁷ Van Eck Jan Ritsema, Daalhuizen Femke. The Randstad as a Network City.

¹⁸ Cheng Jianquan, Le Clercq Frank, Bertolini Luca. Understanding urban networks through accessibility.

¹⁹ Meijers Evert. High-level consumer services in polycentric urban regions: hospital care and higher education between duplication and complementarity.

²⁰ Romein Arie. The contribution of leisure and entertainment to the evolving polycentric urban network on regional scale: towards a new research agenda.

²¹ Zandvliet Robbert, Dijst Martin. Breaking Down the Daily Use of Places A Space-Time Typology of Temporary Populations in the Netherlands.

are mostly developed towards the north of the Istanbul Metropolitan Area, place of forests and water basins²².

This can be seen as a response to social inequalities, social polarization and the fragmentation of cities, intra-urban spatial segregation, for instance trend of increasing socio-spatial polarization between managers and low-skilled workers²³. An increasing number of middle and high income groups have looked to security measures, such as cameras, fences, walls and gates, to separate themselves from other people in the city. These physical measures, in combination with hired guards, replace the “older” social control mechanisms, which are based on social cohesion within the community concerned²⁴.

But for developers gated projects (gated housing areas) offer the opportunity to sell safety and security to a niche market. They have become a profitable segment in the real estate market²⁵.

1.5. Modeling of urban systems and urban planning (3)

One Congress paper describes Predicting Urbanization with Multi-Agents (PUMA) model that consists of various modules, representing the behaviors of specific actors and the first model results. The households module describes households’ housing and work careers in relation to life cycle events (marriage, child birth, aging, job change etc.) and also their daily activity patterns. The households module was implemented and tested for the Northwing of the Dutch Randstad, including about 1.5 million households and 1.6 million dwellings²⁶.

The other paper in this subtopic investigates the relationship between city marketing procedures and urban governance decisions - city time planning, participatory planning and urban regeneration²⁷. One paper covers the issue how ideas of city sustainability was introduced to the Greek planning process²⁸.

1.6. Knowledge economy and urban development (2)

What causal elements of the urban knowledge economy related to growth can be distinguished? In answering this question, two opposite hypotheses were tested: are central cities motors of economic growth, or does the Netherlands as a small country function as united urban field²⁹. The other article in this subsection was devoted to the innovation networks in the Vienna urban region³⁰ built by inter-firm information, financial and other relations. Therefore idea of specific metropolitan innovation system was added to the previously elaborated idea of regional innovation system.

2. Regional innovation system (25)

Spatial dimension of the knowledge generation and diffusion process was the topic of many papers in Amsterdam Congress. This reflects enormous hopes, maybe exaggerated, on the knowledge economy as the engine of the European economy.

2.1. Innovations and regional economic growth/development (6)

Italian authors analyzed the development paths of a number of European knowledge economies within a Regional Innovation System framework, paying special attention to the

²² Cekic Tuba Inal, Gezici Ferhan. Spatial Impacts of new housing trends in the periphery of the Istanbul Metropolitan Area.

²³ Gaschet Frederic, Le Gallo Julie. The Spatial Dimension of Segregation: a case study in four French urban areas, 1990-1999.

²⁴ Smets Peer. Gated communities: their lifestyle versus urban governance.

²⁵ Baycan-Levent Tuzin, Gulumser Aliye Ahu. Gated communities from the perspective of developers.

²⁶ Ettema Dick, de Jong Kor, Timmermans Harry, Bakema Aldrik. PUMA: multi-agent modeling of urban systems.

²⁷ Deffner Alex, Liouris Christos. City Marketing: a significant planning tool for Urban Development in a globalised economy.

²⁸ Antoniou Eftychia. Urban Environmental Planning in Greek Cities. The response of medium sized Greek cities, the case of Volos.

²⁹ Van Oort Frank G., Raspe Otto. The knowledge economy and Dutch cities.

³⁰ Kaufmann Alexander. Innovation networks in metropolitan regions: the case of the Vienna urban region.

skilled human capital, innovative capacity, research and development in high technology industries as key factors specific to knowledge economies³¹. The other (again Italian) authors examine the influence of innovative behaviors on social and economic growth, trying to verify the presence of a concrete link and to define its nature and intensity. Referring to Italian regional systems, about a hundred of static and dynamic indicators, concerning innovation and economic development and divided into several thematic areas, have been estimated³².

The aim of the next Italian work is to estimate the amount of R&D spending for different institutions in Italian provinces (University, Public Administration and Business). The cluster analysis carried out by associating other indicators of economic structure, research and human capital input, innovation output and economic performance has revealed the presence of seven profiles of innovation and territorial development which provide an approximate indication of the Italian provinces' different innovation resources and ability to respond to the competitive challenges posed by the international context³³.

Dutch authors analyze the relation between ICT and productivity in a regional context. Testing in different models show that indeed high labor productivity levels and a high ICT sensitivity go together in a regional context. There is a very strong positive relation between the ICT sensitivity and productivity in the most agglomerate part in the Netherlands. And in suburbs and the rural parts there is also a positive relation between growth of ICT and productivity growth³⁴.

Next paper attempts to define the main determinant factors of entrepreneurial and innovation activities. In particular, the paper attempts to analyze, using an econometric approach, the effects of entrepreneurship on innovation activities and furthermore to clarify the implication on competitiveness and growth³⁵.

Recently, continental Europe has made a bid to become a dynamic player in the biotechnology industry. How is this industry affecting the urban milieu? What is the impact of biotechnology on regional economic development? Is it possible to use knowledge-intensive industries such as biotechnology as an anchor tenant to shape the dynamics of the city. These are subjects of the M.Sable's report³⁶.

2.2. *Knowledge spillovers (6)*

The topic of externalities is developing rapidly in the Regional Science. Agglomeration economy is now considered as a kind of economic externalities. This looks like the efficient way to bridge the previous gap between mainstream economics and Regional Science. Knowledge spillovers are economic externalities. And this topic has received good coverage at the Amsterdam Congress.

One article observed knowledge transfer in 23 German innovation networks (almost 600 participants). Following the pattern of regional systems of innovation (RIS) a distinction has been made between certain groups (e.g. manufacturing and service companies, universities, non-university research organizations). paper focuses on the determinants of knowledge spillovers within these innovation networks. It is universities that are adding the most information and the most knowledge within the common process of innovation. The winners in this knowledge exchange are the manufacturing companies. Besides the cultural proximity or social proximity the spatial proximity of co-operation partners is beneficial to the process of knowledge exchange. For the exchange both of knowledge and of information strong ties are useful at least in the developmental phase of networks and collaborations.

³¹ Brioschi Maria Sole, Cassia Lucio, Colombelli Alessandra. Common Frameworks for Regional Competitiveness: Insights from a Number of Local Knowledge Economies.

³² Baici Eliana, Mainini Cinzia. Innovation and growth. Evidences from Italian regional systems.

³³ Capriati Michele. Expenditure in R&D and local development: an analysis of Italian provinces.

³⁴ Raspe Otto, van Oort Frank, van der Laan Lambert. ICT and Productivity: relations and dynamics in a spatial context.

³⁵ Kokkinou Aikaterini. Entrepreneurship, Innovation Activities and Regional Growth.

³⁶ Sable Michael. The Impact of the Dutch Biopharmaceutical Industry on Regional Economic Development in the Randstad.

Knowledge exchange is improved not only by the strength of ties in particular but also by improvements in networks' coherence³⁷.

The focus of the other paper was on knowledge spillovers between high-technology firms in Europe, as captured by patent citations. Geographical distance has a significant impact on knowledge spillovers. National border effects are important and dominate geographical distance effects. Knowledge flows within European countries more easily than across. Interregional knowledge flows are industry specific and occur most often between regions located close to each other in technological space³⁸.

Next paper analyses the relevance of different types and sources of knowledge (the knowledge sources included are R&D employment, size of public research institutions by field of research - number of employees, budget-, amount of university external research funds from private firms, public departments, German Science Foundation and from other sources) for regional innovation output. Authors found pronounced knowledge spillovers from private sector R&D in adjacent regions that have their geographic center within a 50 km radius around the district under inspection. For university related measures and for more remote regions no such geographic spillovers could be detected³⁹.

Swedish authors analyze the locational relationship between industry R&D and university R&D in Sweden using a simultaneous equation approach and existing differences between different science areas and different industry sectors. Their results indicate that the location of industrial R&D is quite sensitive to the location of university R&D, while the location of university R&D is insensitive to the location of industrial R&D⁴⁰.

Author from Finland assumes that the mobility of highly educated and innovative intensive workers between firms and regions has an important role in the diffusion of knowledge. His analysis concentrates on the regional job flows of individuals working in the high technology sector. Migration plays an important role in the diffusion of knowledge between regions and can lead to significant changes in regional stocks of human capital. The mobility of highly educated was highest in the ICT-sector compared with the other sectors (the share of workers changing job inside the same firm was approximately 40 %). The male mobility rate is equal to or higher than the female mobility rate, the mobility rate is highest among the youngest workers, and it increases with educational level and decreases with the size of the workplace⁴¹.

German authors present a theoretical model based on innovation system and knowledge management approaches but extend these approaches to evolutionary institutional processes including the role of cognitive patterns and trust. The case study is based on the aircraft production sector in the German metropolitan region of Hamburg where relatively wide range of different kinds of institutions can be integrated into a cluster⁴².

2.3. Incubators and Universities as engines of innovation (3)

What factors determine the growth of incubators, particularly which factors are internal and external to the incubators? Using data of incubators in various regions in the developed world, the authors categorized factors into external (regional economic conditions, regional entrepreneurial culture and the degree of stakeholder involvement) and internal (incubation strategy, type of support for start-up firms, and age of the incubator). They use a relatively new approach that matches with small (selected) samples and qualitative (and sometimes fuzzy) data - rough set analysis. The findings suggest an explanation of the

³⁷ Kauffeld-Monz Martina. Knowledge spillovers within regional networks of innovation and the contribution made by public research.

³⁸ Fischer Manfred M., Scherngell Thomas, Jansenberger Eva. The Geography of Knowledge Spillovers between High-Technology Firms in Europe Evidence from a Spatial Interaction Modeling Perspective.

³⁹ Fritsch Michael, Slavtchev Viktor. The Role of Regional Knowledge for Innovation.

⁴⁰ Karlsson Charlie, Andersson Martin. Industry R&D and University R&D – How Are They Related?

⁴¹ Mikkala Kirsi. Knowledge spillovers – mobility of highly educated workers within high technology sector in Finland.

⁴² Draganinska Silviya, Wink Rudiger. Interregional and international knowledge flows in medium technology sectors: The role of formal and informal institutions.

incubator growth mainly based on the diversity in stakeholder involvement and various internal factors of incubators⁴³.

Next paper discusses Public Technological Incubators Program (PTIP) in Israel. It concludes that private incubators cannot fully substitute for public incubators; even after the entrance of the private sector into the area of technological incubator activity, there is still justification for the continuation of the PTIP. The public technological incubator program was also found to be the only answer to national objectives, such as geographical distribution, which includes rural and peripheral areas, and the special incentives given to populations for whom such activities would otherwise be out of reach (new immigrant)⁴⁴. Paper from Finnish authors discusses the case of Finnish higher education organizations (HEO's) – universities and polytechnics - and their new roles in the regional innovation environment⁴⁵.

2.4. Modeling and measuring innovative capability (3)

First paper contributes to the literature by modeling the level of ICT adoption at the Italian regional level (NUT3) using spatial econometric techniques. It focuses on regional differences, which is a much less explored dimension of the Digital Divide. It uses a new metric for the adoption of ICT, namely the number of second level Internet domain names, registered under the ccTLD “.it”. Paper explicitly combines the analysis of determinants with a spatial econometric approach. Contrary to the expectations, the spatial diffusion seems to follow the existing geography of development, rather than dramatically changing it. Very traditional, highly “material” investments do play a great role in explaining the Local Digital Divide. The adoption of ICT is strongly influenced by the level of knowledge available at the province level, as measured by the flow of patent registrations and scientific publications. Paper stresses crucial importance of the coexistence and co-evolution of investment into physical infrastructure and equipment, investment into human capital, and deep changes in organizational structures and procedures in both private and public sector.⁴⁶

Authors of the second paper examine, on an exploratory and evolutionary heuristic point of view, in which conditions clusters can keep performance on the long run despite the conflictual or opportunist bargaining strategies developed by the agents involved⁴⁷. Authors of the third paper introduced a new framework for measuring regional innovative capability, called the Network-based Innovative Capability (NBIC) evaluation matrix⁴⁸.

2.5. Innovation policy (3)

In the past innovation policy was considered as part of the industrial policy. But from the 1980-s it did become independent player and now actively participates in the shaping of European integration. Authors of the first paper explore universities that generate a type of knowledge that is directly applicable to industrial production processes using patents as indicator. They consider 1155 Research Groups, not the university or university teachers, from 10 Spanish universities as an intermediate unit between the university and the academic inventor or innovator⁴⁹.

Second paper presents a comparative analysis of technology policy at both the national and regional levels in Ireland and Northern Ireland respectively. National technology policy tends to reinforce the strengths of a country's industrial system, particularly in relation to large

⁴³ Soetanto Danny P., van Geenhuizen Marina. Technology Incubators as Nodes in Knowledge Networks.

⁴⁴ Frenkel Amnon, Shefer Daniel, Miller Michal. Public vs. Private Technological Incubator Programs: Privatizing the Technological Incubators in Israel.

⁴⁵ Tura Tomi, Uotila Tuomo. Rethinking the Roles of Universities and Polytechnics in a Regional Innovation Environment.

⁴⁶ Bonaccorsi Andrea, Piscitello Lucia, Rossi Cristina. Explaining the territorial adoption of new technologies. A spatial econometric approach.

⁴⁷ Berro Alain, Leroux Isabelle. Modeling bargaining behaviors within biotech clusters towards the «Power of the weak» emergence?

⁴⁸ Tura Tomi, Harmaakorpi Vesa. Measuring Regional Innovative Capability.

⁴⁹ Sero Manuel Acosta, Guerrero Daniel Coronado, Leon M. Dolores, Rosario Rodriguez M., Munoz Marin. What factors determine the generation of patents in Andalusia (Spain)? Does public policy support technological knowledge generation in Universities?

firms and the promotion of R&D in core technologies and focuses less on technology transfer which is often left to regional technological policy initiatives. In lagging regional economies, which are often dominated by SME's, this presents specific challenges for technology policy. The analysis has focused on public sector support for R&D at the firm level, specifically in terms of business-level grant support and how this has changed over the 1992 to 2001 period⁵⁰. Next paper develops ideas of the previous one as it covers the same area of research. Authors evaluate the effectiveness of public support in boosting innovation success using panel data evidence for manufacturing plants in Ireland and Northern Ireland. Development agencies in Ireland and Northern Ireland seem to have effectively targeted innovation support on firms which would otherwise have under-performed in terms of innovation⁵¹.

2.6. Innovation – evidence from European regions (4)

Four papers in this subsection give concrete cases from different European regions and countries. The first investigates the innovativeness of Finnish high technology firms, their local business units, between 1996 and 2002. The role of internal and external factors on the innovativeness of local units is analyzed by the means of the probit analysis. R & D cooperation, both between firms and between firms and research institutions, and the inter-firm mobility of labor, can act as a significant catalyst for innovation activity of high technology establishments.

Innovativeness of local business units is measured in terms of their ability to introduce both product and process innovations. Cooperation not only within the enterprise group, but also with advanced suppliers and demanding customers contributes particularly to the product innovations. The cooperation with research centers, in addition to the cooperation within the enterprise group, seems to increase the likelihood of process innovations⁵².

Second paper analyze the determinants of Irish companies engaging in innovations by their plant characteristics (size, sector, ownership, location), innovation capability, innovation activity and human resource capability⁵³. Two papers deal with Portugal and Hungarian cases in innovation activities⁵⁴, in the last Akos Jakobi focuses on measuring the spatial differentiating influence of ICT factors within Hungary⁵⁵.

2.7. Review of the literature (2)

Two papers gives the overview of ideas and concepts in the literature on the regional innovation systems. The first summarized the development in regionally focused innovation theories and discussed a series of weaknesses in them⁵⁶. Last one explores how innovation policy can deal with institutional change⁵⁷.

3. Transport (19)

One of the distinct features of the Amsterdam Congress was the dominance of the papers devoted to the transport issues. A good part of them was prepared by the Dutch authors.

3.1. Transport and human behavior in space (4)

⁵⁰ Hewitt-Dundas Nola, Andreosso-O'Callaghan Bernadette, Lenihan Helena. Innovation policy in Ireland and Northern Ireland, 1991 to 2001 - the changing face of firm-level financial incentives for R&D.

⁵¹ Roper Stephen, Hewitt-Dundas Nola. Measuring the Impact of Grant Support for Innovation: Panel Data Evidence for Irish Firms.

⁵² Simonen Jaakko The Innovativeness of the Finnish High Technology Firms – The Role of Internal Factors, Cooperation and the Mobility of Labor.

⁵³ Hewitt-Dundas Nola, Leonard Ciara. Embracing a systems perspective of innovation – Evidence from Ireland on the use of innovation links, 1991 to 2002.

⁵⁴ Braga Ascensao, Zorrinho Carlos, Reigado Felisberto Marques. Analysis of the behaviour of Bacia do Coa agents (Interior North of Portugal) face to some European experiences pilot of Information Society.

⁵⁵ Jakobi Akos. Reevaluating regional influences of ICT factors in Hungary.

⁵⁶ Lorentzen Anne. The Spatial dimensions of innovation.

⁵⁷ Bateira Jorge. Innovation Systems: Do they exist? Exploring Luhmann's thinking.

Inside the transport cluster of papers the core topic was - human being, his spatial behavior, and transport. For instance, one paper presented empirical estimates of the traveler's valuation of travel time, scheduled delay and uncertainty derived from a large stated choice experiment among Dutch car commuters facing congestion. Car drivers may decide to travel at other times, change mode or to car-pool. Authors measured the value of time of certain groups of commuters⁵⁸. One author explored human behavior under congested conditions⁵⁹. In the paper of Israel researcher concept of "Intrinsic Hourly Value" was used to underline the determinants of human decisions to choose their trip (method to estimate a specific value that should be assigned to the particular time chosen, based on equilibrium of traffic assignment)⁶⁰. Dutch authors determined the effect of transport cost on commuting flows, on the basis of an analysis of home-to-work journeys between municipalities in Denmark. Special attention was given to a proper estimation method and the form of the distance-decay function⁶¹.

3.2. *Transport's impact on the regional development (3)*

Three papers were devoted to the economic role of transport. In the first authors focused on (possible) intraregional effects of high-speed railway infrastructure (Amsterdam – Brussels – Paris). To do so, this paper presented the results of a discrete choice model for office locations in the Dutch Randstad area. The article combined both stated and revealed choice data in one model to take account of the potential accessibility effect by reducing domestic travel times as well as the connectivity effect of high-speed rail as new transport mode within the Netherlands⁶². The second paper assessed the effect of the Danish motorway network in the last 20 years on urban growth and interaction patterns⁶³. The final paper analyzed the influence of using an intensive transport of goods on population mobility and sustainable development in Galicia⁶⁴.

3.3. *Effects of road pricing (3)*

Several papers were devoted to the effects of introducing road pricing measures on transportation networks. Dutch authors analyzed in a game-theoretic framework route choice problem with elastic demand where road pricing is introduced. The road-pricing problem was formulated using game theory notions with which different games are described. After that, a game-theoretic approach was applied to formulate the road pricing game as social planner (monopoly), Stackelberg, and Cournot games. The main purpose of the experiment was to show the outcomes of different games established for the optimal toll design problem⁶⁵.

Authors of the second paper found out that road pricing is more acceptable when revenues are used to replace existing car taxation or to lower fuel taxes. Personal characteristics of the respondent have an impact on support levels. Higher educated people, as well as respondents with a higher value of time and with higher perceived effectiveness of the measure, seem to find road pricing measures more acceptable than other people. The same holds for people that receive financial support for their commuting costs and for respondents driving many kilometers in a year⁶⁶.

⁵⁸ Tseng Yin Yen, Ubbels Barry, Verhoef Erik. Value of time, schedule delay and reliability.

⁵⁹ Bates John. Practical Modeling of trip rescheduling under congested conditions.

⁶⁰ Aviram Haim. Applying Multi-Hour Traffic Assignment to Estimate Trips Distribution between Hours and the Intrinsic Value of Hour of the Day.

⁶¹ De Vries Jacob J., Nijkamp Peter, Rietveld Piet. Exponential or power distance-decay for commuting? An alternative specification.

⁶² Willigers Jasper, Floor Han, van Wee Bert. High-speed rail's impact on the location of office employment within the Dutch Randstad area.

⁶³ Nielsen Thomas S., Hovgesen Henrik Harder. Do motorways shape urban growth? Analysis of growth patterns with micro-level data – before and after road openings in two Danish motorway corridors.

⁶⁴ Laxe Fernando Gonzalez, Palmero Federico Martin, Pose Fernanda Miguelez. Transport and sustainable development: impact of the systems of population mobility and goods on the ecological footprint in Galicia (Spain).

⁶⁵ Joksimovic Dusica, Verhoef Erik, Bliemer Michiel C. J., Bovy Piet H. L. Different Policy Objectives of the Road Pricing Problem – a Game Theory Approach.

⁶⁶ Ubbels Barry, Verhoef Erik. Acceptability of road pricing and revenue use in the Netherlands.

Last paper in this subsection focused on possible influences of road pricing policies on residential and work location choices of households (whether or not to relocate and the choice of the new residential location). On average roughly 5 % of the respondents indicated a remarkably high probability of moving to another residential location if a road pricing measure would be implemented. The probability of searching for another job on the other hand was found to be significantly higher for all price measures: on average 13,5 %⁶⁷.

3.4. Spatial effects of transport policy (3)

Several Congress papers were devoted to the impact of the transport policy. The first studied the spatial impact of two main aspects of European transport policy - infrastructure investments and pricing. Authors analyze what are the benefits of the European regions that arise from infrastructure and transport pricing policies (changes of transport cost) in a series of policy scenarios. They apply a spatial general equilibrium model, the CGEurope model, to evaluate the benefits for the NUTS-3 regions of Europe. They analyze the impact of different policy scenarios on the spatial income distribution by applying measures of cohesion⁶⁸.

Second paper suggests an accessibility approach to assess distributive effects of transport plans or programs, measuring changes in the spatial distribution of four different accessibility indicators, computed and mapped using a GIS support. This paper concludes that regional cohesion effects derived from the development of transport networks in Spain in the period 1992-2004 have been equitable for the road mode while polarizing for the rail mode⁶⁹.

Last paper reviews recent changes to transport policy in the UK - from policies of "predict and provide" to an integrated transport policy - and the role of new knowledge on induced behavioral travel effects (behavioral reactions to new transport capacity)⁷⁰.

3.5. Analyzing and modeling transport systems (2)

In fact much more than two papers were devoted to the topic of transport modeling. Practically in each of the 18 papers authors used models to understand numerous transport effects on the regional economy and human behavior.

The objective of the paper written by authors from Israel is to show how agglomeration economies fostered by investments in intra-urban transport projects could be introduced in cost-benefit analysis. Authors employ the proposed Light Rail Transit (LRT) in the Tel Aviv metropolitan area as a case for illustration⁷¹.

In the next paper the direct impacts from changes in transport costs on level of wages and productivity have been estimated. The direct and derived impacts of road pricing have been analyzed with local economic model LINE and include the impacts on regional production, income and employment. Regions with high level of average commuting cost (suburban areas in Greater Copenhagen) suffers most, whereas the centre of Copenhagen suffers least because of short commuting distances. In rural areas impacts are on or just below average because low level of road pricing. The analysis shows that due to reduction in congestion the Greater Copenhagen area benefit through reduction in the transport costs, whereas rural areas suffer, because of long commuting distances⁷².

3.6. Regional effects of road investment (2)

Two papers in our subset deals with road investment impacts. In the first author analyses the macroeconomic productivity effects of road investment in 13 western European

⁶⁷ Tillema Taede, Ettema Dick, van Wee Bert. Road pricing and (re)location decisions households.

⁶⁸ Brocker Johannes, Schneekloth Nils. European Transport Policy and Cohesion: An Assessment by CGE Analysis.

⁶⁹ Suarez Elena Lopez. Measuring regional cohesion effects of large-scale transport infrastructure investments: an accessibility approach.

⁷⁰ Noland Robert B. Transport Planning and Environmental Assessment: Research, Rhetoric and Reality.

⁷¹ Shefer Dani, Aviram Haim. Incorporating Agglomeration Economies in Transport Cost-Benefit Analysis: The Case of Proposed Light-Rail Transit in the Tel-Aviv Metropolitan Area.

⁷² Larsen Morten Marott, Jensen-Butler Bjarne, Madsen Chris. Modeling transport in an interregional General Equilibrium Model with externalities.

countries⁷³. In the second author studies the impact of major investments in road and public transport infrastructure on car travel and travel behavior in Bergen and Oslo. Oslo, being three times bigger than Bergen, has still congestion problems in spite of massive investments whereas Bergen has hardly any. For the future, a continued road building strategy might prove less advantageous than before. For both cities urban sprawl appears to be the major challenge ahead⁷⁴.

3.7. New services in European transport (2)

Two articles covered the issues of relatively new services and means of communication. We mean long-haul scheduled air services and low-cost airlines in Europe. The first paper examines the recent development of long-haul scheduled air services from Europe and identifies the increasing dominance of the major hub airports. The limited range of existing services from regional airports is identified and the extent to which regional and secondary airports may take a larger share of future traffic is discussed. Specific attention is given to the impact of commercial factors (e.g. alliances, hubs) and technological issues (in the form of new aircraft types and use of smaller aircraft on long-haul sectors)⁷⁵. In the second paper author investigates success story of Ryanair low-cost air carrier, using time series analysis based on monthly passenger data from 1991- 2003⁷⁶.

4. Regional growth (18)

Key problem covered by several papers in the topic of regional growth is how to escape zero-sum game when one regions are winners at the expense of the rest regions. How to adapt and correct classical Solow's models of exogenous economic growth? Calibration of relatively new endogenous models of economic growth suggested in the New Economic Geography. These are some issues for discussion opened in the section.

4.1. Contradictions of regional growth: convergence and disparities (8)

Several papers were devoted to the combined problem of growth and disparities. In the first authors provide an empirical estimation of tradeoff between growth and inequalities at a geographical disaggregation level for 14 EU countries. They assess the positive influence of widening intra-regional disparities on local economic growth and emphasize that Northern and Southern regions behave differently. Economic development in NUTS1 regions belonging to core EU members is much more influenced by an increase in spatial inequalities⁷⁷.

In the second authors investigate whether space and spatial relationships play a significant role in the specification of the relationship between regional inequality and regional growth. They analyze the evolution of income disparities in European regions and transition countries in the period 1977-2002. Their result have confirmed the tendency in overall European inequality to decrease over time, accompanied by an expansion of the intra-country (and then between regions) disparities. The entrance of Eastern regions has caused at a first stage a consistent increase in the level of inequality in Europe, with a tendency of attenuation over time. Relationship between inequality and growth is positive, indicating that the process of development requires the presence of initial disparities to start⁷⁸.

In the third paper authors investigate the special case of regional inequality in small countries like Israel. The paper attempts to determine whether commonly used inequality measures produce meaningful estimates when applied to small countries, thus making it possible to compare the results of analysis obtained for such countries with those obtained elsewhere. A

⁷³ Kopp Andreas. Aggregate Productivity Effects of Road Investment. A Reassessment for Western Europe.

⁷⁴ Lian Jon Inge. Impact of main road investments in Bergen and Oslo.

⁷⁵ Dennis Nigel P.S. The development of long-haul air services from regional and secondary airports in Europe.

⁷⁶ Pitfield D.E. Ryanair's impact on airline market share from the London area airports: a time series analysis.

⁷⁷ Crozet Matthieu, Koenig Pamina. The Cohesion vs Growth Tradeoff: Evidence from EU Regions (1980-2000).

⁷⁸ Arbia Giuseppe, de Dominicis Laura, Piras Gianfranco. Regional Growth and Regional Inequality in EU and Transition Countries: a Spatial Econometric Approach.

bootstrapping experiment and sensitivity test are set up to determine whether inequality measures commonly used in regional analysis produce meaningful estimates when applied to countries of small size. According to results of the tests, only the population weighted coefficient of variation (Williamson's index) and population-weighted Gini coefficient may be considered as more or less reliable inequality measures, when applied to small countries (sensitivity of commonly used income inequality measures to changes in the ranking, size and number of regions into which a country is divided)⁷⁹.

The main objective of the fourth paper is to analyze the issue of spatial association of the local growth process. The local growth in Italy is characterized by significant differences across macro regions and especially across sectors. Therefore the stress in the article was on the employment dynamics in the service and in the manufacturing sectors in the contemporary period of regional transformation from manufacturing to service economy. Authors examined effects of diversity externalities, human capital, social environment and network externalities on economic growth.⁸⁰

Author of the fifth paper investigates the link between economies' structural characteristics and their growth performances. His model implies that the effects of technology diffusion on the convergence process are twofold - for and against convergence⁸¹.

The sixth paper presents the results of a growth accounting exercise applied to regional industry data of The Netherlands between 1995-2002. Authors find that low productivity growth in The Netherlands is particularly situated in the economic core regions of the west and south and is caused by slow growth of MFP. The slow MFP-growth in the core regions is partly related to the high and rising traffic congestion and shortage of space⁸².

Authors of the seventh paper asks whether changes in regional unemployment differences in West Germany are persistent over time (differences in regional unemployment rates are often used to describe regional economic inequality). Analysis follows a time-series approach to economic convergence. Authors find strong evidence for convergence and the speed of convergence is found to be very high⁸³.

Last paper connects regional disparities in Spain with the business cycle. The empirical finding of an important regional imitation effect in wage bargainings may explain the persistence of disparities and the positive relationship between regional unemployment dispersion and the business cycle⁸⁴.

4.2. *Factors of regional growth (6)*

Six articles deal with different factors of regional economic growth. In the first the determinants of economic growth and technological progress have been analyzed accounting for knowledge transmission channels, namely new business formation activity and university-industry relations. The results suggest that new ventures and partnerships between university and industry amplify the permeability of the knowledge filter, increase the flow of knowledge and thus spur economic growth. Entrepreneurship "capital" is an essential resource for growth. Entrepreneurship public policy programs should stimulate entrepreneurial awareness and develop entrepreneurial skills⁸⁵.

The second paper discusses the extent to which the sectoral structure can explain why some city-regions have economies that grow faster than others (study of 46 major city-regions across Europe). This discussion leads groupings of cities according to sectoral (hard) specialization. These sector-based typologies are then supplemented by local (soft) evidence

⁷⁹ Portnov Boris A., Felsenstein Daniel. Measuring Regional Inequality in Small Countries.

⁸⁰ Paci Raffaele, Usai Stefano. Agglomeration economies and growth in Italian local labor systems. 1991-2001.

⁸¹ Lanzafame Matteo. Economic Structure, technology diffusion and convergence: the case of the Italian Regions.

⁸² Broersma Lourens, van Dijk Jouke. Regional Differences in Productivity Growth in The Netherlands: An Industry-level Growth Accounting.

⁸³ Bayer Christian, Juessen Falko. Convergence in West German Regional Unemployment Rates.

⁸⁴ Bande Roberto, Fernandez Melchor, Montuenga Victor. Regional Unemployment in Spain: Disparities, Business Cycle and Wage Setting.

⁸⁵ Mueller Pamela. Exploring the Knowledge Filter: How Entrepreneurship and University-Industry Relations Drive Economic Growth.

related to trends, initiatives, particular conditions and, in general, the ways in which some cities try to take advantage of their sectoral specializations or to develop new specializations. The hard and soft evidence have been drawn on to suggest typologies for the features that promote economic growth in cities⁸⁶.

Small process innovating and young firms grow faster than old, large and non innovating firms. Therefore author of the third paper asks if regions with the highest share of small and medium size firms should be the ones with the highest growth⁸⁷.

The fourth paper deals with the growth potential the Information Technologies offer to backward regions within an integrated European market. Growth dynamics induced by an intensive use of these technologies are not a common pattern in all European regions. Lack of infrastructures or the low level of human capital can be important constraints to the modernization of production processes⁸⁸.

Authors of the fifth paper study the dynamics of local employment growth in West Germany from 1980 to 2001. Using dynamic panel techniques, they analyze the nature and the timing of Jacobs- and Marshall-Arrow-Romer externalities, as well as the impact of general human capital spillovers. Their results show that industries benefit both from local specialization and from a diversified and urbanized surrounding environment. The impact of the latter factor is more important for manufacturing than for service industries⁸⁹.

Last paper in this subsection covers the issue of regional growth in Hungary. The author found that the share of agricultural employment and the change in export orientation of the regions are the paramount determinants of regional growth. (Export activities and the sector composition of employment are found to matter most clearly for regional growth.) A region having twice as high a share in agricultural employment than another produces a growth rate that is 15-20% lower⁹⁰.

4.3. Human capital and regional economic growth (4)

Special attentions was paid to the role of human capital (education factors, location of human capital inside the regions, etc.) in regional growth. Authors stated that human capital begins influence growth patterns from some level of regional economic development (before other factors matter).

In the first article authors analyze the impact of human capital on Italian regional growth during the past two decades. The growth of Italian regions has been driven by the development of sectors that need a human capital capable of adapting to existing production techniques rather than able of implementing new ones⁹¹.

The main aim of the second study is to provide evidence concerning the contribution of human capital, acquired in the formal education system, to the growth of the Spanish regions over the last few decades. Results enable to assess the use of the formal education system as a tool for promoting regional economic development⁹². Next paper studies to what extent accessibility to R&D and human capital can explain regional export⁹³.

Italian authors of the last paper in this subsection estimate the long-run relationships between total factor productivity and three types of capital stocks: R&D capital, human capital and public capital, between 1980 and 2001. Human capital and infrastructure seem to play an important role in explaining productivity differences. These two factors can be

⁸⁶ Thomas Sasha, Robins Ian. Developing Typologies of City-Regional Growth.

⁸⁷ Calvo Jose L. Industrial Employment Growth in Spanish Regions: the Role Played by Size, Innovation, and Spatial Aspects.

⁸⁸ Bellone Flora. IT adoption and spatial agglomeration: a model of cumulative adoption and growth in a small open economy.

⁸⁹ Blien Uwe, Suedekum Jens, Wolf Katja. Local Employment Growth in West Germany: A Dynamic Panel Approach.

⁹⁰ Iara Anna. Regional growth in Hungary: The impact of European economic integration.

⁹¹ Baici Eliana, Casalone Giorgia. Has human capital accounted for regional economic growth in Italy? A panel analysis on the 1980-2001 period.

⁹² Lopez-Bazo Enrique, Moreno Rosina. Human capital and regional economic growth. Evidence from the dual approach.

⁹³ Grasjo Urban. Human capital, R&D and Regional Export.

considered as suitable instruments to design a regional policy aimed at lowering the regional gap⁹⁴.

5. Regional labor markets (16)

Two major regional markets to analyze in the Congress papers are labor and housing markets. Their strength (degree of competitiveness) is *very* different in various regions of Europe. Topic of labor markets, as a rule, is better presented in the Northern countries where distorting effects of commuting and footloose activities are not so great (regional labor markets borders are more stable, not necessary to update their boundaries) as in the densely populated countries of Southern and Central Europe.

5.1. Features of regional labor markets (8)

Eight papers in our subset covers the issue of general features of regional labor markets. In the first authors applied two-step classification of German regional labor markets. The first step included regression analysis to identify the exogenous determinants of the success of labor market policy. In the second step, different types of labor markets are determined from a specific variant of cluster analysis which used the weighted variables identified as significant in the first step. The new classification has been employed in the evaluation of labor market policy⁹⁵.

The main purpose of the second paper is to present analysis of the regional labor mobility in Norway in terms of growth of employment focusing on the number and quality of the persons that enter and leave the local labor markets. Author tests the hypothesis if the regional growth of employment is positively or negatively correlated to the level of different segments of gross mobility to and from jobs generally, and more particularly for employment in knowledge intensive service industries and for the employment broken down by different groups of nationality⁹⁶.

The third paper investigates the laws of Verdoorn and Okun in order to determine thresholds for employment and unemployment in all Germany for the period 1992- 2000. Disaggregated datasets for 180 German functional regions provide the basis for obtaining efficient estimates and spatial labor market characteristics, reveals that the relations between employment, unemployment and production may be distorted by strong spatial dependencies. The results indicate that minimum output growth sufficient for a rise in employment is below the level needed for a simultaneous drop in the unemployment rate⁹⁷.

The fourth paper presents an empirical study of income per worker (and per capita) convergence across German labor market regions during 1992 to 2002 using nonparametric techniques. Our estimates suggest that there will be a similar degree of inequality among German regions in the long-run as in comparison to the situation today. The substantial regional policy expenditures made by the German government and the EU will not achieve their aim of equalization, and need therefore to be critically reviewed⁹⁸.

Author of the fifth article investigate the regional dimension to the Dutch labor market by evaluating regional unemployment and participation differentials. Paper argues that large and persistent regional differences in (hidden) unemployment are an appropriate indicator of regional dimension. Using data from 1975 to 2003, author finds that the variation of aggregate unemployment over provinces (European NUTS2) was small but persistent. Regional unemployment differentials, and regional inactivity differentials to a smaller extent, indicate a

⁹⁴ Bronziñand, Piselli Raffaello Paolo. What determines productivity level in the long run? Evidence from Italian Regions.

⁹⁵ Blien Uwe, Hirschenauer Franziska, Hong Van Phan. Classification of regional labor markets for purposes of research and of labor market policy.

⁹⁶ Stambol Lasse Sigbjorn. The function of labor market mobility to regional economic growth generally and by new service economy and labor force nationality especially.

⁹⁷ Kosfeld Reinhold, Dreger Christian. Thresholds for Employment and Unemployment. A Spatial Analysis of German Regional Labor Markets 1992-2000.

⁹⁸ Juessen Falko. A distribution dynamics approach to regional income convergence in reunified Germany.

regional dimension to the labor market. The regional dimension appears to be particularly strong for vulnerable groups such as women, youths and lower educated workers⁹⁹.

The main aim of the sixth paper is to study the European regional disparities in the labor market, considering the regional productive structures and some regional institutional variables. It is widely known that one of the EU's most important stylized facts are the regional disparities among regions. Such differences are related mostly to the income per capita and to the labor market captured through the unemployment rates. In this paper Italian authors estimate data where the dependent variable is the regional unemployment rate and the independent variables are some variables related to the productive structure and some regional institutional aspects. The results obtained confirm that the institutional variables, such as the centralization of wage bargaining, the decentralization of public expenditure and the bureaucracy level, play an important impacts on the unemployment rates¹⁰⁰.

The seventh paper has been concerned with the need to better understand the ways in which patterns of commuting are changing. The paper examined examples taken from the contrasting regions centered on Valencia and London¹⁰¹.

The objective of the last paper is to contribute to the study of the labor markets of two Spanish regions that have maintained over the last few decades a persistent unemployment differential with respect to the remainder of the country: Andalusia and Extremadura. A brief descriptive analysis is given of the most important variables of these regional labor markets, together with the corresponding shift-share and virtual economy analysis¹⁰².

5.2. Supply and demand matching process on the regional labor markets (3)

Three papers covers the issue of supply/demand interaction on the regional labor markets. The first studied the matching process of job seekers and vacant jobs in local labor markets in Finland. Authors estimated the ability of the local markets to form new matches and traced whether the differences in it could be explained by the differing population density across markets and by the distribution of the education level of job seekers. After controlling the effect of average education level of job seekers, high-density areas are more productive in producing successful matches than others¹⁰³.

In the second paper the same Finnish author (as in the first paper) examines the matching of job seekers and vacancies, focusing on the role of job seekers' labor market status in the matching process. Job seekers are divided into four employability groups according to their labor market status: employed job seekers, job seekers out of the labor force, unemployed job seekers with a spell of unemployment shorter than a year, and long-term unemployed job seekers. Employability of job seekers with differing labor market status differs, and therefore the composition of the pool of job seekers in a local labor market affects the ability of that market to form successful matches. An increase in the share of job seekers out of the labor force increases successful matches, while an increase in the share of long-term unemployed job seekers weakens the ability of a labor market to form successful matches¹⁰⁴.

Next paper examined the impact of regional unemployment rates on regional job mobility and firm switches. German authors used a unique data set which contains both detailed individual information and also the district in which the firm is located, and linked this with data from the Federal Employment Services. Study confirms the central influence that the individual determinants, such as gender, age, qualification level, work experience and

⁹⁹ Vermeulen Wouter. Regional disparities in a small country?

¹⁰⁰ Caroleo Floro Ernesto, Coppola Gianluigi. The impact of the Institutions on Regional Unemployment disparities.

¹⁰¹ Coombes Mike, Casado-Diaz Jose M. The evolution of Local Labor Market Areas in contrasting regions.

¹⁰² Murillo Ines, Nunez Fernando, Usabiaga Carlos. Differential and persistence in unemployment: an analysis of the Spanish regions with the highest unemployment rates.

¹⁰³ Hynninen Sanna-Mari, Lahtonen Jukka. Does population density matter in the matching process of heterogeneous job seekers and vacancies?

¹⁰⁴ Hynninen Sanna-Mari. Labor market status of job seekers in regional matching processes.

the household context, have on mobility. Study shows, the non-monetary aspects of regional mobility constitute a quantity that can not be ignored¹⁰⁵.

5.3. Supply dynamics on the regional labor markets (3)

Three papers deal with factors, that influence the changes in the quality and quantity of supply in the regional labor markets. In the first article authors investigate the employment assimilation of immigrants who entered Finland between 1990 and 2002. Immigrant groups are classified into four categories: OECD, former Soviet Union, Refugee Countries, and others. Employment probability of immigrants clearly improves over the time spent in Finland¹⁰⁶.

Second paper presents an analysis of training and education efforts of firms and governments to improve the quality of the labor force in three Dutch seaport clusters. The presence of leader firms, willing to invest in training and education improves an education regime¹⁰⁷.

Last paper looks at the evolution of the labor markets in Estonia, Latvia, and Lithuania since the beginning of transition until 2003, with a particular focus on labor force participation. How did labor supply in the Baltic countries respond to changes in minimum wages, unemployment benefits and retirement regulation? Do the marked differences in labor market policies between the countries result in different patterns of participation? What are the obstacles to and driving forces of participation? These are questions to pose and answer in the article. Relative contribution of participation and demographic trends to the dynamics of the labor force varied substantially both over the years and across the three countries¹⁰⁸.

5.4. Gender wage gap (2)

Two papers stress the problem of gender wage gap. First article analyses the role of occupational segregation in explaining the overall gender wage gap in the Portuguese economy. Policies aimed to change female occupational distribution are not likely to have the desired impact on gender wage differentials. Policies targeted at decreasing the observed gender wage gap may have more effective results if focused on reducing wage disparities within occupations rather than attempting to reallocate female labor¹⁰⁹.

Main goal of the second paper is to analyze the existence of discrimination effects in women's work valuation in the Galician economy. Author offers an analysis of the evolution of the wage differential between 1995 and 2002 with the objective to shed light on which factors can be influencing wage discrimination persistence in Galicia¹¹⁰.

6. Water issues (16)

Amsterdam Congress was specifically focused on the water management issues. Therefore the number of water-related articles was much more than in the last Congresses. Predominantly Dutch researchers shared their experience of water management and flood control with the rest scientific community.

6.1. New approaches for water management (6)

Several reports presented new ideas in water management adequate to the philosophy of the sustainable network society. New paradigm is that the large-scale disasters as a possible future event should be viewed not only as a hydrological feature, but as an economic phenomenon as well.

¹⁰⁵ Mertens Antje, Haas Anette. Regional Unemployment and Job Switches in Germany – An Analysis at District Level.

¹⁰⁶ Sarvimaki Matti, Hamalainen Kari, Kangasharju Aki, Pekkala Sari. Employment Assimilation of Immigrants: Evidence from Finland.

¹⁰⁷ De Langen Peter W. Improving training and education in clusters. Lessons from three port clusters.

¹⁰⁸ Hazans Mihails. Looking for the Workforce: the Elderly, Discouraged Workers, Minorities, and Students in the Baltic Labor Markets.

¹⁰⁹ Mendes Raquel Vale. Occupational segregation and the Portuguese gender wage gap.

¹¹⁰ Pena-Boquete Yolanda. Gender wage discrimination in Galicia.

First paper mentioned that Dutch water management currently is in a position of fundamental change and renewal. As a consequence of factors such as climate change, continuous land subsidence, urbanization pressures, and a lacking natural resilience of the water system to absorb water surpluses and shortages, the emphases has shifted from technical measures such as heightening dikes and enlarging drainage capacities towards allowing water to take more space. Since the late 1990s, water management has been modified from an approach of “keeping it out” towards “fitting it in”. As a consequence, water management and spatial planning are associated more closely, especially at the regional level¹¹¹.

Present planning policy and research in Flanders is dominated by a planning discourse that considers city and countryside as antipoles. This discourse ignores the strong coexistence of urban and rural functions and activities on the countryside and is no longer tenable within the concept of network society. Dutch authors of the second paper discusses three alternative planning discourses about the relationship between city and countryside which try to meet the characteristics of network society in a different way: city and countryside as networks of activities, as systems of places with an identity and as ecosystems (the common layer of city and countryside). Each of these discourses focuses on water management: as the main structuring principle in the ecosystem discourse, as an identity builder in the systems-of places discourse or as an element of selective weaving of urban and agro-industrial water networks in the network-of-activities discourse. In these three discourses, water management is not a separate sector nor divided over different policy sectors. Water management concepts are integrated in an overall vision on how urban and rural functions and activities in the countryside should interrelate¹¹².

Authors in the third paper examine generalized view that integrated water management must be made through a centralized mechanism, that command and control policies are the only tool available and effective. Therefore the functioning of river basins tend to be simplified with dams and the research agenda has been directed to design major models with powerful decision support systems for one coordinator body to decide. But the effects of these centralized and controlled systems have not been able to address the unpredictability of human and ecosystem behavior. The hypothesis authors would like to test is that boundaries and negotiation between boundaries can be good tools for sustainable water management. Authors develop a formal model with upstream and downstream regions and try to understand in what conditions boundaries can be good for sustainable water management. They try to introduce the concept of boundaries in an applied model for a particular river basin and simulate the solutions for a centralized planning body and for a decentralized negotiation system¹¹³.

The central aim of the fourth paper was to compare three different accounts of policy implementation, Policy Network Analysis, Discourse Analysis, Historical Institutionalism and to explore their relative strengths and limitations. These frameworks produce complementary insights into the implementation of policy innovations, which underlines the usefulness of multimodel analyses in policy studies. The newly developing governance practices, the development of shared perceptions and perspectives is hindered by a struggle for discursive hegemony between the water management discourse and the spatial planning discourse. The deeply routed river management institutions hinder the choice for a different institutional path, which is necessary for realizing policy innovations¹¹⁴.

Two last reports deal with new approaches for flood management. First identifies the main strategies to harmonize urbanization (spatial and urban planning in flood-prone areas) and flood risk management. Until recently, the strategy in the Randstad has been to keep floods away from urban areas via technical measures. The recent policy change added spatial

¹¹¹ Woltjer Johan, Al Niels. Strategic capacities in Dutch water management and spatial planning.

¹¹² Allaert Georges, Leinfelder Hans, Abeele Peter Vanden, Verhoestraete David. Water management as a decisive factor in the land use planning of agriculture in an urbanising context.

¹¹³ Dentinho Tomaz, Silva Vasco. Boundaries as tools for sustainable water management.

¹¹⁴ Van den Brink Margo, Meijerink Sander. Implementing policy innovations. Resource dependence, struggle for discursive hegemony and institutional inertia in the Dutch river policy domain.

measures to the current strategy, and introduced elements of the strategy to keep urban areas away from floods (strategy to prepare urban areas for floods)¹¹⁵.

Next report continues this issue. For decades, the only answer to hazardous situations (e.g. flooding by increased river discharges or by incoming storm water) was to strengthen dikes and dams. This led to damage in the natural water system, a declining biodiversity and destruction of the unique estuary and river landscapes. Nowadays, different approaches are more frequently implemented, with creating more space for the rivers as a guiding principle. Instead of stemming and rapid discharge, water is contained in estuary and catchment areas. The alternative approach to water management contributes to a more sustainable development of the estuary (often densely populated areas, accommodating several conflicting spatial and economical functions, such as residential areas, ports and harbors, industrial zones, farming and recreational facilities), protecting the natural and ecological values¹¹⁶.

6.2. *Economic aspects of river flooding (3)*

Three papers in this subtopic cover economic risks of river floods. First paper assessed the flood risks in an area of the Brielse Dijkkring for three different causes of flooding: by failure of primary or secondary flood defenses or by lack of regional discharge capacity due to extreme rainfall. It is recommended to decision-makers not only to meet the present safety norms for flooding, but also to map the influence on flood risks and question if it is necessary to take measures in order to reduce the flood risk (influence of future zoning on flood risks)¹¹⁷.

Second paper explores the determinants of the implicit price of the risk of flooding. Authors assess, using hedonic pricing method, the variation in the percentage change in the price of a house located in a floodplain, as compared to houses located outside the floodplain. Specific attention was paid to the perceived level of risk; elements affecting the perception of individuals on the effective risk of flooding and allowing them to update their perception of the level of risk.¹¹⁸

In the last paper authors investigate the phenomenon of flood risk's perception. They apply elements of the psychometric paradigm, since it is regarded as the leading theory in the field of risk perception 16 characteristics of the risk perception of flooding and 6 of the risk perception of water nuisance¹¹⁹. Performing factor analysis to these characteristics has shown that they can be organized on a higher level into two factors: a factor interpreted as "dread risk" consisting of the characteristics: uncontrollable risk, dread towards risk, global catastrophic, consequences fatal, not equitable, high risk to future generations, not easily reducible risk, increasing risk, involuntary exposure; and a factor interpreted as "unknown risk" consisting of the characteristics: not observable risk, unknown to the exposed, delayed effects, new risk, risk unknown to science. Most important is the first factor: "dread risk". The higher a hazards score on this factor, the higher its perceived risk.

6.3. *Modeling river floods (3)*

Articles in this subsection reflect the progress in modeling of river floods. In the first author present a new way of thinking about the complex flood protection problem in a densely populated country with a highly developed economic network. She presents a first effort to model major distortions caused by natural disasters using an adapted Input-Output (I-O) model. In contrast to the existing I-O models, this model is able to deal with production disturbances and emerging disequilibria on the market, which has not been the case before. As a result, one can explore various flood scenarios and describe possible recovery paths¹²⁰.

¹¹⁵ Oosterberg Willem, van Drimmelen Camiel, van der Vlist Maarten. Strategies to harmonize urbanization and flood risk management in delta's.

¹¹⁶ Rijnveld M., Duijn M., van Rooy P. Public participation in flood control areas: approaches to 'sustainable' communication strategies.

¹¹⁷ Van Veen Nelle, Kok Matthijs, Kolen Bas. Influence of future zoning on flood risks.

¹¹⁸ Daniel Vanessa E., Florax Raymond J.G.M., Rietveld Piet. River Flooding and Housing Values: An Economic Assessment of Environmental Risk.

¹¹⁹ Terpstra T., Gutteling J.M., Geldof G.D., Kappe B. The perception of flood risk and water nuisance.

¹²⁰ Bockarjova Marija. Economic Scenarios of Flood Risks: A Look at Regional Development.

In the second article same author with his colleague share new developments in Dutch thinking about the increasing risk of big floods¹²¹ and offer new flood modeling exercises. Last paper outlined a method of estimating the risk of flooding, using a combination of hydrological models, GIS and a damage model, due to precipitation under different scenarios. The case study of the Haarlemmermeer showed that the impact of climate change will increase the risk significantly, but the risk change may become larger, depending on the scenario¹²².

6.4. Flood management (regional cases) (2)

Authors of two papers share concrete regional experience of flood management. In the first they analyze several spatial indicators in the form of maps describing population growth, spatial patterns, and the historical growth of built-up areas in a study case in Friuli-Venezia Giulia (FVG) Region in northern Italy. Two future scenarios produced by the model were used for a flood risk assessment in Pordenone (one of the four provinces of FVG). The flood risk analysis is based on a hydrological hazard map for the Livenza River catchment area. Early results of this study show that the main driving force of natural disasters damage is not only increasing flood hazard, but increasing vulnerability, mainly due to urbanization in flood prone areas. They argue for holistic catchment planning approach for adaptation to floods, using the basin as the basic planning unit¹²³. Second paper covers the role of forestry in flood management¹²⁴.

6.5. Water demand management (2)

Two papers from Italian and Israel authors reflect the problems of water demand management. The first describes concepts of reduction in the use of water resources, through increased efficiency of water application for Mediterranean regions¹²⁵. The second covers land use and water management issues in Israel by focusing on wastewater irrigation. Irrigation with treated effluents has become an important water source in Israel due to scarcity of natural water resources. Wastewater treatment processes can decrease pollutants levels¹²⁶.

7. Tourism sector (16)

From year to year tourism issues has increased attention among Congresses' authors. In Amsterdam a bit less than 5% of the total reports were devoted to this topic.

7.1. Role of tourism in regional development (6)

Authors of six articles examine the economic role of tourism in regional development. The first paper reveals the impact of tourism on host communities, its place in urban regeneration, social and geographical dimensions of tourism. The paper tries to provide a critical approach of how places of cultural significance are transformed into places of consumption by investigating the relationship between culture as a resource for identity and social meaning and culture as an important economic resource for post-industrial cities¹²⁷. The objective of the second paper is to assess the role of international tourism in the economic development of the Spanish economy during the 1960-2002 period¹²⁸.

¹²¹ Bockarjova Marija, Steenge Albert E. Thinking about Big Floods in a Small Country: Dutch Modeling Exercises.

¹²² Hoes Olivier, van Kruiningen Frans. Risk assessment to quantify the interaction between land use and water management.

¹²³ Barredo Jose I., Lavalle Carlo, Sagris Valentina, Engelen Guy. Representing future urban and regional scenarios for flood hazard mitigation.

¹²⁴ Hall Graham, Cratchley Roger. The role of forestry in flood management in a Welsh upland catchment.

¹²⁵ Creaco Salvo, Querini Giulio, Tamburrino Marzia. Water demand management in the Mediterranean region.

¹²⁶ Haruvy Nava, Shalhevet Sarit. Land Use and Water Management in Israel- Economic and Environmental Analysis of Sustainable Reuse of Wastewater in Agriculture.

¹²⁷ Galdini Rossana. Structural changes in the tourist industry.

¹²⁸ Jimenez Isabel Cortes, Ortuno Manuel Artis. The role of the tourism sector in economic development. Lessons from the Spanish experience.

Other two reports were devoted to the role of tourism sector in the balancing of regional differences. Antonio Russo describes the essence of the «Cultural Gateways» project in the case study of Catalonia. The project's aim is the development of a sustainable urban-rural relationship in the organization of tourist regions around main urban destination. The departure point is that the preservation of cultural heritage through responsible tourism is the key to generating well-being in host communities. The authors argue to look at the "metropolitan" or "regional" dimension of tourism governance and thus of cultural strategies to guarantee a more sustainable use of the cultural assets for the host community - to lower pressure levels on central destinations, enhanced entrepreneurial capacity in rural areas, and eventually a more articulated visitor mobility on the territory. The costs and revenues generated by tourism are then brought to a better spatial balance, and the spin-off potential of tourism in areas with a weak economic basis (but rich in culture) is boosted. All concerned parties may thus profit from the implementation of "gateways", physical and virtual, which reconnect culture with existing distribution channels, or favor the development of new ones¹²⁹.

Italian authors describe the concept of local tourist system as not only the naturalistic and the cultural resources, the hotels but also the economic and services activities that can be related to tourism. They argue that a holistic approach allows to use the tourist activities as a factor of territorial re-balance instead of territorial polarization¹³⁰.

In the next paper tourism is seen as a networking activity. The purpose of the paper is to explore to which extent network potential exists among Greek coastal cities. As mobility increases information and familiarity could pose as a new kind of connection between coastal cities. This paper aims to explore the structure and dynamics of such a network at an inter-intra regional level. The focus is on coastal cities since they are very popular tourism destinations, but many of their traditional activities are degrading, therefore they provide the opportunity for regeneration through tourism.

Still the main function of a network which is to share decision-making, evenly allocate resources and alleviate disparities can provide benefits to all the cities participating in it. Complementary destinations can act as all-year round destination providing an answer to one of the major problems of tourism. Careful planning and acknowledgement of the network can initiate mechanisms to protect destinations from being over-exploited and exceeding their carrying capacity and on the other hand a planned allocation of tourists can help control the segment of the market that each destination is accommodating (higher spending, longer staying, etc.). Networking will increase the tourism market and the economic benefits with an ultimate goal to share them within the region, but places and destinations will continue to compete. Networking is not minimizing competition, but it works in a parallel way in order to develop some level of co-operation as well. The authors explored policy implications and the potential for expanding and planning a tourist network in order to contribute and promote sustainable development of Greek coastal cities¹³¹.

Last paper unites cultural heritage and economic development through heritage railways. Abandoned railway lines can be found in areas whose productive profile has undergone significant shifts. The decline of mining and/or heavy industrial activity often explains to a large extent the railway's initial demise. An emphasis on tourism and the services quite often appears as the only possible refuge from the ravages of de-industrialization¹³².

7.2. Modeling tourism (local tourism markets) (4)

In four papers Congress authors suggested models of local tourism markets. The purpose of the first paper is to relate the tourism-demand model with the traditional theories that explain international trade flows. In the existing tourism literature, tourism flows and

¹²⁹ Russo Antonio. Cultural gateways: building partnerships for sustainable development in destination regions.

¹³⁰ Ruggiero Vittorio, Scrofani Luigi. The touristic local systems as a means to re-balance territorial differences in Sicily.

¹³¹ Economou Dimitrios, Vrassida Maria. Urban dynamics and networking in coastal cities: the case of tourism.

¹³² Bogiazides Nick, Kotsiou Eftychia, Vougioukas Manos. The Regional Impact of Heritage Railways.

demand forecasts are typically explained by the demand-side variables. But in the traditional trade theories, international trade flows are explained from the supply-side variables, the comparative advantage of the exporting countries. A model is proposed in the paper, trying to explain the factors that from a supply-side perspective can decide the comparative advantage of countries in tourism. Authors suggest strong support for the relevance of supply-side factors in explaining international tourism flows (such as both natural endowments and created assets associated with foreign investments, hotel capacity and level of development)

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On the other hand in the second paper tourism regional dynamics was delivered with demand-side model. Demand-oriented figures are combined with attraction related datasets and mode dependent travel time information of all potential destinations in order to develop a GIS-based spatial distribution model of leisure day trips. This model is then calibrated and validated using independent datasets, e.g. traffic census data. The study is focused on the urban conurbation of Berlin, Germany and the surrounding potential recreation areas which are defined as the entire area of the federal state Brandenburg. This paper addresses a specific form of leisure or recreational traffic- day trips on weekends from urban areas to the surroundings¹³⁴.

Next article try to explain, through statistical analysis applied to an econometrical model, the differences existing among Italian local labor markets specialized in tourism. The result of research is that the dichotomy of the Italian economy - North versus South - is also present in the tourism industry¹³⁵.

Authors of the last paper in this subsection propose a review of the territorial models applied to tourism industry and their sources of competitiveness. They apply a methodology for the identification of tourist local systems and their typologies using a tourist filiere. They use a spatial model regarding different kinds of Italian tourist local systems (rural systems, arts cities, tourist districts) in order to measure external economies and territorial networks¹³⁶.

7.3. *Tourism planning (3)*

Three papers were directed to the topic of tourism planning and policy making. The goal of the first paper was to show differences (with two parameters - growth in tourism and in population) in the tourism development process, create typology to use it in the planning and policy making process¹³⁷. Author of the second article argues for the river basin approach in tourism planning. Tourism development planning is taking place according administrative territorial borders till nowadays in Latvia and in other tourism destinations abroad. The author has selected Daugava river basin, exactly Ogre – Daugava's right side tributary - basin as case study for tourism planning¹³⁸. In the next study, tourism provincial policies in Turkey since 1970's and influence of those policies on investment distribution and space are investigated; socio-cultural and socio-economic reasons underlying the failure of Turkey's developed cities to reach the required level in the tourism development are stated. Authors stressed that Turkey's tourism planning and organization efforts should be sustainable without being affected by political interests and developments¹³⁹.

7.4. *Regional problems in tourism development (3)*

This subsection embraces three articles reflecting concrete regional problems in tourism development. The aim of the first paper is to analyze the regional determinants of hard-to-fill vacancies and external skills shortages in the hospitality sector. The data source

¹³³ Zhang Jie, Jensen Camilla. Comparative Advantage in Tourism: A Supply-Side Analysis of Tourism Flows.

¹³⁴ Vogel Arnd. Modeling leisure day trips between Berlin and its surrounding.

¹³⁵ Coppola Gianluigi, Vanacore Teresa. Local tourism markets in Italy. An econometric analysis and policy proposals.

¹³⁶ Capone Francesco, Boix Rafael. Sources of competitiveness in tourist local systems: an application to Italy.

¹³⁷ Coccossis H., Constantoglou M.E. The need of spatial typologies in tourism planning and policy making: the Greek case.

¹³⁸ Slara Agita. The River basin approach in tourism planning.

¹³⁹ Kerimoglu Ebru, Ciraci Hale. The analysis of relation between socio-cultural-economic and tourism development levels of the provinces in Turkey.

for this study was generated in the year 2000 and includes information on 181 hotels and 121 restaurants in Andalusia. hourly net wages are the main instrument firms use to reduce hard-to-fill vacancies and skills shortages¹⁴⁰.

The main purpose of the second paper is to examine the financing framework of the Greek tourist enterprises, financial difficulties of the sector. Paper concludes with proposals concerning the adoption of the appropriate tourism policy that will contribute to the supporting of the tourism firms and especially to their access to finance¹⁴¹. In the last paper author analyzes the FDI inflows and their impact on the tourism system in Croatia and the influence on competitiveness of tourism firms¹⁴².

8. EU integration/enlargement/cohesion (15)

Problem of European nation building is of enormous difficulty. But it definitely has spatial dimension. Regional and temporal distribution of costs and benefits of EU integration is not even, not equal. This topic was the essence of 15-18 core reports at the Amsterdam Congress. But in fact the topic of spatial dimension of EU integration is not limited by one section but scattered in many of them (like border regions, for instance).

8.1. Regional effects of European integration (5)

Five reports cover the subject of regional effects of EU integration. Author of the first examines regional effects of previous enlargements of the European Union for three cases of enlargement on employment, wage, investments and population growth. Effects on regional wage levels and investment rates are stronger than on employment, productivity and wage growth at least in the long run. He finds evidence of increased wage growth in border regions after accession, which concentrate mainly on the newly joining member states. He argues that the likely effects of integration of the Central and Eastern European Countries into the European Union on the spatial structure of employment may be less strong than often argued. While border regions in the candidate countries may expect modestly higher increases in investments and wages than inland regions in the long run, the regional structure of existing member states should remain largely unaffected both in the short and the long run¹⁴³.

Authors of the second article posed several questions for the further answers: 1) what is the impact of economic integration on regional industrial patterns? 2) have advanced and lagging-behind regions developed similar or different types of regional specialization? 3) have metropolitan and peripheral regions developed the same or different mix of economic activities? 4) are there particular types of structural change more closely related to strong growth performance? 5) is the process of integration associated with winners and losers at the regional level?¹⁴⁴

Objective of the third paper was to explain the relevance of the *acquis communautaire* on state aid in the context of Romanian regional policy. Romania should adopt regional policy frameworks that are both targeted on its specific regional problems and compatible with the patterns of EU structural assistance. For a country lacking tradition in regional policy-making, the design of regional policy frameworks that satisfy both sets of criteria is difficult¹⁴⁵.

Next paper covers interregional migration phenomenon in the perspective of Romania's accession to the EU. It is urgent now to establish a new legal and institutional

¹⁴⁰ Marchante Andres J., Ortega Bienvenido, Pagan Ricardo. Determinants of skills shortages and hard-to-fill vacancies in the Hospitality Sector.

¹⁴¹ Balomenou Chrysanthi K., Lagos Dimitris, Arsenos Panagiotis J. Tourist enterprises financing in Greece.

¹⁴² Stokovic Igor. The role of the FDI in Croatia's tourism sector.

¹⁴³ Huber Peter. An Empirical Analysis of the Regional Effects of European Integration.

¹⁴⁴ Petrakos George, Fotopoulos Georgios, Kallioras Dimitris. Economic integration, regional structural change and cohesion in the EU new member-states.

¹⁴⁵ Dragan Gabriela. Romania, between the "magnetism" of Structural Funds and the "corrective" tools of EU state aid regulations.

framework for migration management¹⁴⁶. Last paper links EU enlargement and the problems of competitiveness of western Balkan companies¹⁴⁷.

8.2. *Convergence between European regions (4)*

Four papers in our subset deal with regional convergence. First paper calls for a grass root approach to the phenomenon of regional inequalities in Europe. If the economic structure, the localization and potential linkages of each region are not formally included in the estimation of regional dynamics, then any policy will focus only on the “top-of-the-iceberg” of possible measures to correct regional imbalances¹⁴⁸.

Author of the second paper analyzes the dialectic relation of European economic integration under the prism of the European Union’s public finance. The course of the European integration is examined via the Community Budget. The vital question is the relation of economic completion and unequal growth¹⁴⁹.

Next paper deals with the role of Structural Funds in the regional convergence. As has been shown by impact assessments based on macroeconomic modeling, in spite of its limited financial means, EU cohesion policy can have a substantial impact on catching-up. Infrastructure endowment can be seen as a precondition for growth, though not as a growth-enhancing investment per se. Even if it generally takes time to achieve a needed enhancement of human capital, this can be regarded as key to long-term growth. Aid to the productive sector should be limited to specific projects enhancing the business environment, and support for start-ups and SMEs. The contribution of EU cohesion policy to real convergence will depend predominantly on Member States’ own national and regional policies. The role of regional and national authorities in setting up strategies to support and implement Structural Funds programs will be of key importance¹⁵⁰. Last paper underlines factors that work for formation of European regional convergence clubs¹⁵¹.

8.3. *Regional competitiveness in EU (2)*

As a rule, topic of regional competitiveness is selected by the regions who now are losing in the global competition. So for them it is the question of the utmost importance. The objective of the first paper is to propose way to consider factors in order to achieve a regional competitiveness ranking and to study changes in them over time (1987- 2002). The first set of factors is based on specific factors that upgrade the existing business fabric (Innovation, R+D, networking, labor markets, training, support for the use of advanced technology, services provided to companies, etc.). The second set is how environmental conditions in which such business operates can be improved (transport infrastructure, communications (TIC), the environment- sustainable development, use of renewable energy, etc.)¹⁵².

Author of the second paper analyses the situation and competitive evolution of the European regions from the perspective of the unit labor costs and their factorial decomposition. Lower level of costs determines a higher economic growth and an improved competitiveness of the region both in the external and internal market.¹⁵³

8.4. *Social policy in EU (2)*

¹⁴⁶ Constantin Daniela-Luminita, Nicolescu Luminita. Romania external migration from the perspective of accession to the EU: Institutional and behavioural challenges.

¹⁴⁷ Frohlich Zlatan. Road to EU: Enlargement and Competitiveness of Western Balkan Companies.

¹⁴⁸ Le Gallo Julie, Dall’erba Sandy. Spatial and sectoral productivity convergence between European Regions, 1975-2000.

¹⁴⁹ Kostopoulos T. European economic integration, regional inequalities and the Community budget.

¹⁵⁰ Stierle Michael H. Conditions for a contribution by the Structural Funds to real convergence of the Recently Acceded Member States.

¹⁵¹ Mora Toni. Factors conditioning the formation of European regional convergence clubs.

¹⁵² Y Oliva Maria de Vicente, Calvo Miguel Angel Marcos. Objective Method for Quantifying Regional Competitiveness: a case study applied to EU15 Regions.

¹⁵³ Rodil-Marzabal Oscar. Competitiveness and regional growth in the European Union: Disparities in unit labor costs.

Authors in this subsection raise the issue of evolution of the European social policy – less welfare state, more burden for the property owner. In the first article authors give interpretation of the underlying characteristics and patterns of current welfare mix and social policies in European Union. Great changes currently in place in Europe’s demography (increased ethnic, culture and religious diversity, ageing, etc.), family structures (increased diversity of family types, changes in family roles) and labor markets (changing patterns of job creation/destruction due to knowledge-based society and globalization) are expected to redefine the scope of social cohesion and social policy.

When authors restrict the analysis to “old” EU16, the different clustering techniques applied reveal a basic scheme of two main groups of countries: the four southern Mediterranean countries on the one hand, and all the remaining countries on the other. Expanded analysis to enlarged EU17 results in the same clear diversity of welfare types; although, quite surprisingly, some of the new countries cluster with the main group of old EU countries. Mediterranean countries continue to cluster in a special group¹⁵⁴.

Authors in the last paper stress the absence of EU centralized common social protection and policy framework like the framework that exists for agriculture. Different social philosophies and conceptual frameworks exist in the Member States, which in many cases supersede the traditional left – right divide (the Roman-German system, the Anglo-Irish system, the Nordic system). The character of relationships between European Union economic and social policies is asymmetric. Economic, or “market-making”, policy has become gradually Europeanized, comprising in many instances strict rulings and sanctions, while the social, or “market-correcting”, policy has to be agreed through intergovernmental processes, on the basis of, in most cases, unanimous consensus. In contrast to economic policy, there is no clear commitment and a common political vision as regards social policy at the European level¹⁵⁵.

8.5. Links between sectoral and spatial policy/spatial development in EU (2)

Two articles in this subsection mention lack of consistency between European sectoral and spatial policy. In the first the author mention that there is no doubt that the lack of co-ordination between Community policies causes complex problems – in regard to the effective assignment of financial subsidies as well as the goals of Community sector policies. The spatial effects of these policies do not automatically complement each other. European spatial development geared to co-ordination and territorial cohesion seems the order of the day¹⁵⁶. Next paper reflects effects of EU non-spatial policies on the spatial development in the Netherlands¹⁵⁷.

9. Methodology of regional research (14)

As a rule, authors in this section check old and new models and concepts of Regional Science on the new empirical data of European integration.

9.1. Location issues (6)

Six papers in this subtopic deal with location issues. The first paper aims at showing how far the shape of a studied area influences the results of optimal location-allocation models. Paper confirms that “physical geography” also matters: spatial differences in economic performance may arise even when the economies are initially similar in structure (the effect of the shape of a region/country on the optimal location of human activities). The morphology of the regions is almost totally absent from the various economic geography models proposed in the literature.

¹⁵⁴ Ferreira Leonor Vasconcelos, Figueiredo Adelaide. Welfare regimes in the EU 15 and in the enlarged Europe: an exploratory analysis.

¹⁵⁵ Iosifides Theodoros, Korres George. European Integration and the Future of Social Policy Making.

¹⁵⁶ Schafer Nicole. Co-ordinating European sectoral policies against the background of European Spatial Development.

¹⁵⁷ Evers David. Effects of non-spatial EU policies on spatial developments: the case of the Netherlands.

Authors limit experience to the Simple Plant Location Problem (SPLP) which captures the fundamental trade-off of economic geography between accessibility and economies-of-scales. SPLP is built on the fundamental trade-off of economic geography between minimizing transportation costs by creating facilities (centrifugal force) and minimizing the number of facilities due to the presence of economies of scales (centripetal force). The paper shows that the magnitude of the trade-off strongly depends on the shape of the region: the more compact the region, the more sensitive the interplay of the two forces.

The administrative boundaries can generate differences in locations and hence economic development. All types of appendages are costly. Regions that are elongated require a greater number of facilities than those with a compact shape; this effect however depends upon the way a region is merged into a common market (type of border; relative position). The results help at understanding how far an area (country/region) has larger development problems than others just because of its shape and/or of the way this area is linked within a common market (elongation of the country and length of the common border). When comparing two countries such as France and Italy, the impact of a shock in demand or in intermediate product at one location is likely to exhibit very different patterns according to the shape of the territory¹⁵⁸.

Second paper is aimed to discuss the interaction between location and daily mobility in cities. According to previous research, distance traveled daily and the amount of car use in Scandinavian cities are factors influenced by urban density and residential location. The paper presents the results from an analysis of travel behavior in the cities of Oslo, Bergen, and Trondheim. In this article, geocoded travel surveys and GIS were used to confirm the relationship between travel behavior and urban density, residential location and location of destinations. The focus has been the integrated effect of accessibility by public transport, access to car parking, and the location of destinations.

The results confirm previous findings that travel behavior is influenced by residential location. An equally important factor is the location of workplaces and other business activities. The results indicate that businesses moving from the central areas to the urban fringes may have been one of the driving forces behind the growth in car traffic in cities the last 20 years¹⁵⁹.

Third paper attempts to examine the impact of decentralization on national performance, economic growth and fiscal stability. It analyzes the empirical relationship between regional specialization and fiscal decentralization for a panel of 13 Member States of the European Union. The analysis shows that rather autonomous regions tend to diversify their production structure in order to insure against adverse supply shocks¹⁶⁰.

Next paper focuses on the decomposition of location measures according to a twofold geographical level of analysis. The decomposition of relative concentration indices provides a rigorous method to quantify the cross-country divergence in localization from the inner-country agglomeration patterns. Author provided a methodology based on the use of additively decomposable entropy indices in location studies. Each country specialization index is defined as the difference between the weighted average of the regional specialization indicators relative to the EU and the regional specialization measures with respect to the country¹⁶¹.

In the fifth paper authors present a combined strategy to find out localization patterns of population groups (i.e. immigrant minorities) in an urban area. This approach includes non spatial and spatial measures of residential segregation and spatial autocorrelation statistics. Localization patterns are diverse and authors find out two opposite situations: dispersed and centered. Spatial autocorrelation statistics are useful to detect areas with the need for social assistance for immigrant groups.

¹⁵⁸ Peeters Dominique, Thomas Isabelle. Influences of the shape of a territory on the optimal locations of human activities? A numerical geography approach.

¹⁵⁹ Engebretsen Oystein. Location and daily mobility.

¹⁶⁰ Schutz Ulrike Stierle-von. Fiscal Design and the Location of Economic Activity.

¹⁶¹ Cutrini Eleonora. The Balassa Index meets the Theil Index: a Decomposition Methodology for Location Studies.

The case of Barcelona Region presents a different situation from other populated cities in Europe because of the fast growth of immigrant population and the diversity of origins. The most segregated groups are Pakistanis and Philippines with relative high level segregation in four dimensions, in both cases, the Barcelona municipality and its region¹⁶².

Last paper publishes income data at 500 by 500 meter cells, showing significant spatial patterns of distribution and growth of low and high income groups. All Dutch central city areas have regained high income groups in the 1995-2000 period, while outer city district areas are facing income stagnation. The Dutch government intervenes on different levels trying to mix low and high income groups. Although based on common sense to avoid concentration of problem areas, practical aims related to measurable spatial patterns of income distribution are difficult to find¹⁶³.

9.2. Methodology of regional science: calibration of old and new models (4)

Development of Regional Science depends directly upon its ability to update old and elaborate new models. Amsterdam Congress gave examples of several fruitful attempts in this field at least in three directions: central place theory, Zipf's law and New Economic Geography models.

M.Sonis' paper deals with the critical reevaluation of the methodology of classical Christaller - Losch Central Place Theory. The central place hierarchy and multi-regional input-output analysis are fusing together, and in a result the decomposition of the Leontief Inverse for Input-Output Central Place system reflects the process of complication of the evolving hierarchy of Central places¹⁶⁴.

Next paper examines the possibility of measuring the primacy of the urban size distribution using the second or third order polynomial fit in OLS estimations, and focuses on the way in which the slope of the Log(Rank) / Log (Size) relationship may differ within the estimated fit. As a result, the crude Zipf law estimate using the linear functional form may produce quite misleading results. Author finds that certain countries with strong regional governance or a history of regional city-states have "anti-primate" distributions, at least at the top end of the size distribution¹⁶⁵.

The third paper in this list survey the NEG literature and critically evaluate its contribution relative to earlier work on similar topics. Author proceed with assessment analyzing if and to which extent the features of the Krugman's model are effective in investigating a real local system of firms: the Etna Valley, an industrial agglomeration specialized in the production of microelectronic components in the area around the Sicilian town of Catania¹⁶⁶.

Finally it is important to mention Gunther Maier's article on survey among regional scientists about what are the most important journals in the discipline. It gave the correct picture about the most influential journals in regional science in general and in the methodology of the regional science in particular. The most important journal is "Regional Studies". It occupies the top position in almost every ranking that author derives from the survey. Marked differences can be found between European countries on the one side and the US and Japan on the other¹⁶⁷.

9.3. Agglomeration effect (4)

Agglomeration effect was introduced by A.Marshall in the 1880s, but then this concept has been "reinvented" by authors on the new industrial districts since the 1980s and was given a central position in the "new economic geography" in spatial economic models

¹⁶² Martori Joan Carles, Hoberg Karen, Surinach Jordi. Segregation measures and spatial autocorrelation. Location patterns of immigrant minorities in the Barcelona Region.

¹⁶³ De Vries Aldert. Income segregation in The Netherlands: trends and analysis.

¹⁶⁴ Sonis Michael. Central Place Theory after Christaller and Losch: Some further explorations.

¹⁶⁵ Crampton Graham. The Rank-Size Rule in Europe: testing Zipf's law using European data.

¹⁶⁶ Ruggiero Alessia. Paul Krugman and the NEG: as assessment in the light of the dynamics of a "real world" local system of firms.

¹⁶⁷ Maier Gunther. What do we think are the most important journals in regional science?

based on monopolistic competition. It plays a critical role in the field of urban and regional policy, particularly in those development strategies based on clusters of economic activity. (Detailed characteristic of this evolution is given in Van Geenhuizen's Amsterdam Congress report on Agglomeration Economies and Heterogeneity between Innovative Young Firms).

Four articles deepen our understanding of the agglomeration effect in contemporary European regional economy. The objective of the first article work is to study the industrial agglomeration in the Spanish territory using quantitative methodologies and qualitative methods and to compare the difference of the results obtained with each technique¹⁶⁸.

Second paper studies the extent to which diversification and agglomeration effects account for regional differences in labor productivity and labor productivity growth in The Netherlands in the 1990's. Authors find a substantial diversity and agglomeration effects. These effects account for roughly 60% of the explained variation in regional relative to national labor productivity and about 55% of the regional labor productivity growth, relative to national growth. For regional productivity they found agglomeration advantages in terms of job concentration. High job density in a region gives higher labor productivity. This positive effect is mitigated when job density of neighboring regions is taken into account¹⁶⁹.

Third paper studies the regional concentration of human capital from a family perspective. It examines the residential choice of couples in which both spouses have higher education. The results show that education has an effect on the locational choices of individuals. These couples are concentrated in the metropolitan area and the university cities. With highly educated couples, human capital concentrates too¹⁷⁰. Last paper examines the concentration effects of skilled workers in larger cities¹⁷¹.

10. Spatial behavior of firms (12)

Increase of the economic role of footloose activities, mobile assets, service economy, characteristic for the network society, attracts attention to the spatial behavior of firms. Not surprisingly that this topic is usually elaborated, as Amsterdam Congress showed, by the representatives of the developed European countries.

10.1. Firm migration/relocation (6)

Six reports in our subset was devoted to the firm migration. Authors of the first gave literature review of the link between effects of firm relocation on the performance of firms¹⁷².

Authors of the second article investigate role of firm migration in regional economic change. In the Netherlands firm migration rates decrease sharply with larger geographical scales. Therefore the key process in studying the contribution of firm migration to the regional economy takes place at micro level of the individual firm and even the entrepreneur¹⁷³.

In the third article the regional patterns of firm migration are shown (factors that play a main part in causing changes in firm migration, etc.) with a focus on the movements in and out of the national economic core region (the Randstad). One can witness for the sector of manufacturing industry a gradual change, from a clear-cut core-periphery deconcentration pattern in the past to a more erratic pattern at present. Authors examine the role of government policies in guiding firm migrations to policy assisted regions and locations¹⁷⁴.

The fourth paper deals with the relocation of firms in the Netherlands. The main question is which firms, by what characteristics, decide to move. Firm relocation is driven both by firm internal factors, such as growth, age, and type of activity, as well as external factors, relating to the business cycle, the geographical environment, the composition of the

¹⁶⁸ Beneyto M. Jesus Santa Maria, Perez Jose Miguel Giner, Olivares Antonio Fuster. The industry location in Spain: new methods for measuring industrial agglomeration.

¹⁶⁹ Broersma Lourens Oosterhaven Jan. Regional Labor Productivity in The Netherlands. Diversification and Agglomeration Economies.

¹⁷⁰ Jauhiainen Signe. Regional concentration of highly educated couples.

¹⁷¹ De Blasio Guido. Production or consumption? Disentangling the skill-agglomeration connection.

¹⁷² Knoblen J., Oerlemans L.A.G. The effects of firm relocation on firm performance: A literature review.

¹⁷³ Van Wissen Leo, Schutjens Veronique. Geographical scale and the role of firm migration in spatial economic dynamics.

¹⁷⁴ Pellenbarg P.H. Firm migration in the Netherlands.

labor force, and the composition of the firm population, as well as linkages with other firms. Authors investigate the characteristics of firms that have an influence on the decision of firms to relocate. The more employees a firm has, the lower the probability of migration. Lowest migration rates were found in the trade sector, the highest in the services sector¹⁷⁵.

The fifth paper highlights how corporate ownership and structure, knowledge flows and location influence innovation activities among firms in Swedish regions. Authors examine how firm characteristics (corporate structure, size, capital and knowledge assets, R&D persistence, embeddedness in scientific, horizontal and vertical innovation systems), innovation-system collaboration, market extension and firm location influence economic performance, innovation efforts and innovation output¹⁷⁶.

Last paper analyze complex process of agglomeration of firms into industrial districts when cities are also competing for them. Firms choose to agglomerate in those cities where after optimal entry their profits will be maximized. Since cities are different, their attractiveness also differ. Authors undertook empirical analysis of advantages and disadvantages of emerging industrial district 22@ in Barcelona in comparison with other European industrial districts (like Greater London, Ile de France, Dublin, etc). The investigate the potential effect of investment in infrastructure in Barcelona to improve its attractiveness. In particular, they are interested in the factors that can be responsible for growing density of firms located in 22@ district¹⁷⁷.

10.2. Spatial development of new firms (4)

Special attention was paid in Amsterdam Congress for the development of new firms. Several reports in our subset was devoted to this topic. The central research problem in the first paper is how and why do new fast-growing firms develop in space during their life course? The development in space involves the location, relocation, opening and closure of branches of new firms. The influence of firm-internal factors has been neglected in the past. Meanwhile recent empirical research shows that relocation decisions of firms are mainly determined by firm internal factors. Therefore this study shows how the changing characteristics of the firm, its external relationships, the changing role of the entrepreneur and his personal relationships affect the spatial development of new firms¹⁷⁸.

Authors of the second paper investigate regional differences in the level and the development of regional new business formation activity. The level of regional new firm formation is rather path-dependent so that changes are relatively small. They think that main factors determining the level of regional start-ups are innovation and entrepreneurship. In addition, unemployment plays a role. Steering innovation and creating an entrepreneurial atmosphere could be an appropriate starting point for policy measures that try to promote start-ups. A policy that is aiming at stimulating the regional level of entrepreneurship needs patience and a long-term orientation. According to the results, it appears quite likely that the main benefits of such a policy will arise only for future generations but not for the current one¹⁷⁹.

The focus of the next study has been on young, innovative companies active in producer markets. There is a considerable heterogeneity between young, innovative companies in terms of needs for urban agglomeration economies. Within one and the same economic (sub)sector, companies may be location-bound, footloose to some degree, or their behavior does not show a clear pattern¹⁸⁰.

¹⁷⁵ Huisman Corina, van Wissen Leo. A model of internal firm relocation in the Netherlands.

¹⁷⁶ Johansson Borje, Loof Hans, Olsson Amy Rader. Firm Location, Corporate Structure, R&D Investment, Innovation and Productivity.

¹⁷⁷ Mascarilla O., Yegorov Y. Spatial Agglomeration of Firms: Theory and Application for Industrial District 22@ of Barcelona.

¹⁷⁸ Stam Erik. Why Butterflies Don't Leave. Spatial development of new firms.

¹⁷⁹ Fritsch Michael, Mueller Pamela. The Persistence of Regional New Business Formation- Activity over Time – Assessing the Potential of Policy Promotion Programs.

¹⁸⁰ Van Geenhuizen Marina. Agglomeration Economies and Heterogeneity between Innovative Young Firms.

In this paper, we will focus on the type of urban agglomeration economies that is of interest for innovative companies and lies at the heart of urban incubation hypotheses (e.g. Acs, 2002; Davelaar, 1990).

Few empirical studies have addressed the link between new enterprises and economic change at a local scale, despite entrepreneurs constituting one means of creating employment and increasing local community wealth. Therefore final paper in this subsection pinpoints those factors that determine the birth of new enterprises at a local scale, focusing on towns in the Spanish Autonomous Region of Castilla y Leon. The information used was gathered from the approximately 15 000 companies set up between 2001 and 2003 in the 270 towns with over 1 000 inhabitants in the region, and whose creation as a company was published in the Official Journal of the Business Register Office. The approach used is based on the link between entrepreneurial capacity and regional economic growth, prior to an analysis of regional differences in the setting up of companies within the Spanish economy¹⁸¹.

10.3. Firm competition (2)

First paper in this subsection examines the impact of the main strategies determining the competitive behavior of firms on their survival rate. Having analyzed a sample of Spanish firms throughout the nineties and the first few years of this decade, it can be seen how the effect of the competitive strategies adopted by these firms differs in accordance with the size of the firm; and that both investment in innovations and the innovative behavior undertaken by the firm throughout its life cycle emerge as the main factors determining the likelihood of their surviving¹⁸². Next paper identifies conditions under which asymmetric equilibria may exist when carriers compete in designing their network configurations in a game-theoretical framework¹⁸³.

11. Regional policy and planning (11)

Amsterdam Congress reports demonstrate clearly well that the whole definition of the regional planning and policy is totally changing in the conditions of the network society.

11.1. Spatial planning (5)

Five reports were devoted to the topic of spatial planning. The focus of the first paper was on the new role for the regional level taking into account the principles of multi-level governance and subsidiarity. Authors analyze the recent changes in the spatial planning systems of the Netherlands, Flanders (Belgium), and England; the most important that the role of the regional government is becoming more important¹⁸⁴.

The second paper discusses the main ideas and first results of a research program into the use of space by firms belonging to particular economic clusters. The aim is to investigate whether and why firms within such clusters relocate differently than non-clustered firms, what the spatial implications are and the policy possibilities could be of such behavior¹⁸⁵.

Regional planning initiatives emerge in response to a growing number of land use and related issues that transcend political and jurisdictional boundaries and often involve business and nonprofit organizations. Cities are no longer centrals in planning discussions. Urban networks better reflect the new spatial dynamics. Regional planning strategies are sought to link the public and private spheres of this urban networks action. An important starting point is to organize relations between the relevant and different governmental bodies in the multi-level and multi-agency society. How can the abundance of subterritorial governmental bodies be connected, especially within the light of decentralization processes that are going on? In addition an important question is how this public sphere can be linked to the sphere of private regional action. What are important elements in strategies of 'organizing connectivity'? Will 'pragmatic regionalism with a purpose' be an interesting strategy? In the light of this growing

¹⁸¹ Farina Pedro Moyano Beatriz, Ogando Guillermo Aleixandre Olga. Enterprise creation at a local scale: determining factors in the case of municipalities in Castilla y Leon.

¹⁸² Ortega-Argiles, Rosina R. Moreno. Firm Competitive Strategies and the likelihood of survival. The Spanish case.

¹⁸³ Alderighi Marco, Cento Alessandro, Nijkamp Peter, Rietveld Piet. Network competition: the coexistence of hub-and-spoke and point-to-point systems.

¹⁸⁴ Spaans Marjolein, de Wolff Herman. Changing spatial planning systems and the role of the regional government level. Comparing the Netherlands, Flanders and England.

¹⁸⁵ Vleugel Jaap. Clusters and spatial planning: Towards a research program.

interest in acting regionally, the third paper offers insights in motives for such regionalism. A framework to identify and promote best practices for regional collaboration, with attention for vertical as well as horizontal connectedness within the public sphere, as well as linking this public to the private sphere of regional action is suggested¹⁸⁶.

The fourth study suggests the concept of potential accessibility (what and how can be reached from a given point in space) and explores the use of it as a framework planners can use to approach land use and transportation issues in a different way. Traditional urban transportation planning often neglects this important role infrastructure networks play and limits its focus to the efficiency of the transport system itself. This paper evaluates the potential accessibility in the Amsterdam region on different scales (global - regional – local) and compares these qualities to the spatial pattern of different economic activities to investigate which qualities are more favorable to certain activities than others¹⁸⁷.

The aim of the fifth paper is gaining insights in the diverse spatial quality requirements in the port of Rotterdam. The representation of ports as complex adaptive system is very useful as frame of reference for the analyzing the variety of stakeholders in a port. Authors try to find out if the spatial requirements of the different stakeholders on the port of Rotterdam are adequately expressed in the recent Dutch national policy documents¹⁸⁸.

11.2. Regional policy (3)

Several articles at the Amsterdam Congress were devoted to the topic of Regional policy. Among them, three are in our subset. Authors of the first study support the direction in which thinking about regional policy is moving. They investigate the New Economic Geography question who wins and who loses at the result of agglomeration process.

More funds are channeled to local cores as compared to local peripheries. This makes sense given the prevalence of the agglomeration equilibrium. Theory of the ‘New Economic Geography’, descriptive statistics, and econometric analysis support the conclusion that the European economic geography is characterized by a network of local and stable core periphery systems. This implies that disparities between core regions and their peripheries at a (sub) provincial level of regional aggregation are to stay, as regional policy targeted on peripheries tends to be insufficient to counter centripetal market forces. Even if such policy has an impact, it may be adverse, as core regions may benefit disproportionately in the long run. A focus of regional policy on local agglomerations, which have a realistic chance to hold on to economic activity, is therefore desirable.

But a focus on local cores enforces disparities between provinces and between regions within provinces, Local peripheries benefit absolutely, as agglomeration advantages emanate over distance, but not relatively. More agglomeration may or may not be beneficial for social welfare, depending on the weight of productivity and growth versus the weight of wage equality. Targeting peripheral labor is better from the perspective of regional convergence. It maximizes the durability of the policy impact, since peripheral labor is the most immobile production factor. It dampens, moreover, the increase of intraregional inequality related to the agglomeration process¹⁸⁹.

The second paper deals with the dynamic and consequences of the federal structure and the dual party system for the policy capacities of Flanders, one of the three regions in the Belgian federal state. The central question concerns the implications of some of the main features of a party system for the management of regional economic policy¹⁹⁰.

¹⁸⁶ Janssen-Jansen Leonie, Levelt Melika. *Borderless Space: Ideas for Regional Collaboration*.

¹⁸⁷ Straatemeier Thomas. *Potential accessibility: an interesting conceptual framework to address strategic planning issues in the Amsterdam region?*

Van Gils Marcel, Huys Menno. *The need for more variety in Dutch spatial planning policies: The case of Rotterdam port*.

¹⁸⁸ Van Gils Marcel, Huys Menno. *The need for more variety in Dutch spatial planning policies: The case of Rotterdam port*.

¹⁸⁹ Brakman Steven, Garretsen Harry, Gorter Joeri, van der Horst Albert, Schramm Marc. *New Economic Geography, Empirics, and Regional Policy*.

¹⁹⁰ Devos Carl, Blomme Wouter, Boucke Tine, Staelraeve Sofie. *The opportunities and limits of regional policymaking. Some critical remarks on the Belgian case*.

Last paper presenting the empirical results of a study on spatially concentrated industries in the Eastern part of Germany, where the current regional policy scheme is under debate. “Cluster policy” is one of the main slogans for a new regional policy scheme in East Germany. Particular high spatial concentrations of certain industries are identified (based on employment data) for all East German counties. The existence of business networks in the East German regions is discovered. Spatially concentrated innovation activities are recorded for each region by using patent data. Authors thought that if networks are missing, regional policy could try to stimulate network activities, by paying subsidies for a network management. If spatially concentrated innovative activities are missing, regional policy could try to attract public research units into the respective region. The idea behind this strategy is that the researchers from this units could cooperate with the private firms and contribute to more private research activities¹⁹¹.

11.3. Evaluation of the regional governance (3)

Three articles in our subset deal with evaluation problems. Authors of the first try to give recommendations how to evaluate new forms of regional governance spread over Western Europe. The paper discusses the methodological tasks and pitfalls that evaluators need to tackle in order to assess the benefits and weaknesses of regional governance processes. The paper provides an insight into German evaluation experiences in the field. The state-of-the-art is illustrated by various examples, among others the program evaluations of regional development concepts in Thuringia and Saxony and the process-based evaluation of the REGIONALEN in North Rhine-Westphalia, carried out by ILS NRW in Dortmund¹⁹².

Author of the second article tries to suggest new concept for evaluating innovation activities undertaken under the EU Structural Funds. On 1 January 2007 a new programming period of the European Structural Funds is going to start (2007-2013). The Commission is willing to introduce a new priority (‘Regional Competitiveness and Employment’, former ‘Objective 1’) as a successor of Objective 2 to strengthen the regional competitiveness and the employment. The new priority follows the Lisbon Strategy and therefore mainly promotes innovation and the knowledge society. Therefore the need to assess this new activity does exist. The alternative evaluation concept means little additional work for most of the funded regions. For those regions that already provide high-quality evaluations, the determination of core indicators could even be labor-saving. The results of the evaluations are more consistent in terms of the assessment of funding effects on the innovation potential and the innovation activity of regions¹⁹³.

Author of the last paper analyzes how to evaluate performance of Regional Development Agencies (RDAs) in promoting territorial economic growth and development. Regional Development Agencies (RDAs) aim to be bodies which bring together all activities linked to the promotion of territorial economic development. These entities have the development of endogenous potential. The community regional policy implemented by the European Union, through the European Commission, is delegating greater responsibility to regional governments in the question of the promotion of economic growth and development. For this reason, it promotes the creation of bodies such as RDAs, in regions assisted by Structural Funds. In the process of decentralization of regional policy, RDAs play a significant role as public agencies co-ordinating economic promotion and development strategies in their respective areas. The basic tasks to be developed by these entities are to create a flexible and competitive economic framework to stimulate investment; to support innovation and renovation of technological or development research processes; to provide all kinds of services, such as information, assessment, management help, financing, infrastructure, etc.; to support for SMEs, an area on which all RDAs lay special emphasis,

¹⁹¹ Rosenfeld Martin T.W., Franz Peter, Heimpold Gerhard. The Pattern of Spatially Concentrated Industries in East Germany: A Contribution to the Discussion on Economic “Clusters“.

¹⁹² Panebianco Stefano, Fasselt Jan, Donitz Ulrich, Zimmer-Hegmann Ralf. Evaluating Regional Governance: Methodological Concerns and Practical Experiences.

¹⁹³ Fleischhauer Tanja. A concept for evaluating innovation related actions under the EU Structural Funds.

preferably in those sectors considered of regional interest in relation to the productive structure of each region¹⁹⁴.

12. Housing market (11)

Different European countries depending upon the density of the population and economic activity pose the stress either on labor markets or housing markets. The Netherlands, for instance, as reports at the Congress have demonstrated, is the country with the major concern on housing markets. The opposite is true for the Scandinavian countries.

12.1. Empirical studies of the regional housing markets (8)

Eight articles in our subset were devoted to the empirical studies of the regional housing markets in the European countries. Authors of the first paper consider the relationship between the prices of houses and railway accessibility through hedonic pricing model based on the Dutch residential house transaction in the years 1985 to 2001. They observe 31% price difference for houses within 500m of the nearest station and houses beyond 15km for the station. This difference gets smaller for the case of a mostly chosen station effect where authors encounter the peak house price to be between 250 and 500 meters. At distance category 7500 to 8000 meters they see a smooth decline in the effect of distance on house prices¹⁹⁵.

The central hypothesis in the second paper is that workers in high-unemployment regions are compensated in the housing market. It turned out that size and quality attribute corrected house prices are 10,4 % lower and rents are 2,4 % lower when unemployment in a region is one percent higher. The compensating differential is much stronger in the owner-occupier sector than in the rental sector¹⁹⁶.

The third study aims to quantify the non-economic value of open space that is relevant to spatial policy, making these values easier to consider in policy-making (open spaces that are visible from home, local level open spaces and regional level open spaces). Two complementary methods will be applied in this study: a hedonic pricing method to assess the impact of open space on residential property values and a stated preference approach to establish the value of open space for recreational purposes¹⁹⁷.

The fourth paper aims to assess the factors that improve housing and environmental quality satisfaction and examine whether these specified factors bear any change based on the demographic and socio-economic differences among the users. The most significant factors increasing level of satisfaction have been determined as centrality in the subject of accessibility, maintenance of the environment in the subject of inhabited environmental features, satisfaction in the recreation areas in the subject of environmental quality variants, structural-environmental security of the housing in the subject of security, good neighbour relationships in the subject of neighbor relationships, and physical appearance in the subject of housing environment and physical appearances¹⁹⁸.

Next two papers give us the general picture of changes in housing demand, for the Diyarbakir and Istanbul cases, in Turkey.^{199 200}

The seventh paper investigates regional differences in the housing market in Croatia which has experienced the phase of price liberalization²⁰¹. Last research examines the extent to which a

¹⁹⁴ Gutierrez Baudelio Uruena. Evaluating regional development agencies' (RDAs) assistance on Spanish regional economic growth.

¹⁹⁵ Debrezion Ghebreegziabihier, Pels Eric, Rietveld Piet. The impact of rail transport on the prices of real estate: Empirical study of the Dutch housing market.

¹⁹⁶ Vermeulen Wouter, van Ommeren Jos. Are workers compensated by cheaper housing in regions where unemployment is high? Theory and evidence from a housing demand survey.

¹⁹⁷ Koomen Eric, Dekkers Jasper, Koetse Mark, Rietveld Piet, Scholten Henk. Valuation of metropolitan open space; presenting the research framework.

¹⁹⁸ Kellekci Omer Lutfi, Berkoz Lale. Determinants of user satisfaction in housing and environmental quality: sample of Istanbul metropolitan area.

¹⁹⁹ Sinemillioglu M. Oguz. Mass housing and changings in housing demand, case of Diyarbakir, Turkey.

²⁰⁰ Yirmibesoglu Funda. Differentiation of real estate market in Istanbul between 1995, 2005.

²⁰¹ Botric Valerija. Determinants of regional housing market in Croatia.

qualitative and quantitative improvement in the jobs-housing balance in the different parts of the Parisian region could lead to a considerable reduction in car traffic. The explicit hypothesis under study is that constraints exist within the housing market which affect the mismatch between the place of work and the place of residence of the working population²⁰².

12.2. Modeling housing markets (3)

There are three articles on the topic of modeling housing markets in our subset. The idea of the first is to analyze general spatially identifiable housing market related data on Dutch districts (wijken) with the SOM (self-organizing map, Kohonen Map) and a GIS. The SOM is a neural network technique, which is suitable for data mining. The outcome of the visual analysis was a classification into five categories - urban, urban periphery, pseudo-rural, traditional, and low-income segments²⁰³.

Second study offers the model estimated on data derived from the Dutch National Housing Survey, in which over 75 thousand households were inquired on their current and previous housing situation. Different aspects of the residential choice decision are incorporated in the model, like the dwelling type, the location of the dwelling, the characteristics of the household, and the influence of accessibility. The results show that individual accessibility measures, like migration distance, commuting distance and access to public transport for households without a car, have a significant influence on the residential choice behavior of most of the household types constructed. But dwelling characteristics and social neighborhood qualities are very influential as well²⁰⁴.

Authors of the last article investigate the behavior of households on the Dutch housing market. The tenure choice is modeled in combination with the decision on the quantity of housing services. In the model, income and prices per unit of housing services are used as explanatory variables (combined with other household characteristics). The prices (may) differ between the different tenure types and are designed to take financial regulations into account²⁰⁵.

13. Land use (7)

Land use and water management got special focus at the Amsterdam Congress. As a rule, Dutch authors formed the majority of speakers on the topic.

13.1. Models and methods of land use analysis (5)

Five articles in our subset deal with different models of land use. In the first Israel authors consider a dynamics of land uses transition shares of nine groups of categories of land uses coverage and their aggregation into three major types: agricultural areas, areas with natural vegetation and build up areas. Authors present in detail the Matrix land use analysis and discuss shortly the case of the Mount Carmel urban-rural fringe.

Two new methods of analysis of such land uses redistribution matrices are proposed. The first represents the geometric and analytical algorithm of decomposition of the land use redistribution matrix into the convex combination of the land use matrices which represents the main tendencies of land use redistributions in a given set of regions in a given time period. The second method represents the construction of the artificial land use landscape corresponding to the minimum information land use redistribution with fixed initial and final land use distributions. The comparison of the empirical land uses landscape with the artificial one represents the spatial specifics of an actual land use redistributions connected with different parsimonious behavior of the land users themselves²⁰⁶.

²⁰² Korsu Emre, Massot Marie-Helene. Achieving a jobs-housing balance in the Paris Region: The potential of reducing car traffic.

²⁰³ Kauko Tom, Goetgeluk Roland. Spatial and multidimensional analysis of the Dutch housing market using the Kohonen Map and GIS.

²⁰⁴ Blijie Berry. The impact of accessibility on residential choice: empirical results of a discrete choice model.

²⁰⁵ Ras Michiel, van Gameren Edwin, Eggink Evelien. The demand for housing services in the Netherlands.

²⁰⁶ Sonis M., Shoshany M., Goldshlager N. A study of landscape changes in in Israeli Carmel area (Zichron Ya'cov site, 1944-1990): Application of Matrix Land uses Analysis.

Second paper presents findings from a study conducted on light rail transit stations surroundings in Tel Aviv, in which land use attributes were explicitly calibrated in travel rates models and forecasts. These land use variables were then tested on several land use development policies, in terms of population density and employment distribution. This simulation of various land use policies on the same site enhances the understanding of the land use–transportation interaction. The current findings strongly suggest that the zone’s density and diversity of land uses can play a major role in determining its trip generation patterns. Factors such as population density, job density, the proximity of one’s residence to the workplace and dependency ratio all have the ability to influence daily trip generation trend²⁰⁷.

The third paper discusses the results a research project on the linking of various models in land use that has been undertaken at the Agricultural Economics Research Institute in The Hague²⁰⁸. The fourth paper evaluates the welfare effects of a large multifunctional land use project involving urban construction and infrastructural investment in the Amsterdam South Axis area. Using the technique of partial cost-benefit analysis authors explicitly compare the benefits and costs of combining different land uses in the South Axis project. Modifying the transport infrastructure results in land benefits since it creates space for construction of new buildings and leads to an improved quality of the location. However, these benefits prove to be insufficient to justify the size of the investments in adjusting the transport infrastructure. The analysis suggests that combining different land uses in the considered specification of the project is too costly in comparison with the benefits it yields. Given the excellent location of the South Axis area it should however be possible to design an urban construction program that clearly contributes to the welfare in the Netherlands. To authors opinion, the starting point of such a design should be a less costly specification of the adjustments to transport infrastructure²⁰⁹.

In the last paper, the main characteristics and the relative potentials of plural integrated land use planning system are analyzed and evaluated. A connection between the components of the plural planning system and the relative institutional settings is proposed²¹⁰.

13.2. New approaches for land use planning (2)

Articles on the new approaches for land use planning reflect constant dichotomy, constant dispute between market and state/public policy forces in this area. Land use planning, regional development in general look like the field for these battles.

Authors of the first article argue for the introduction of price signals into land use planning decision-making. Contemporary British land use planning system excludes any use of price signals from its decisions. Because the UK planning system has deliberately constrained the supply of space, and space is an attribute of housing which is income elastic in demand, rising incomes not only drive rising real house prices but also mean that land prices have risen considerably faster than house prices. One of the advantages of introducing price signals into the planning decision making process is that it would achieve a similar degree of relaxation more or less everywhere, as indicated by the patterns of price premiums observed. This would tend to equalize regional house prices over the long term and so allow greater labour mobility. The constraint on land supply and so house prices bite sharpest in regions of high demand. This increases regional house price differentials and makes it harder for poorer workers in less prosperous regions to move to where job prospects are better²¹¹.

²⁰⁷ Ferdman Avigail, Shefer Dani, Bekhor Shlomo. Modeling joint development of land use and light rail transit stations: the case of Tel Aviv.

²⁰⁸ Kuhlman Tom, Tabeau Andrzej, Gaaff Aris, van Tongeren Frank, Dekkers Jasper. Linking models in land use simulation: Application of the Land Use Scanner to changes in agricultural area.

²⁰⁹ Besseling Paul, Ebrege Jos, Saitua Rafael, Ossokina Ioulia. Multifunctional land use in the Amsterdam South Axis area: a cost-benefit analysis.

²¹⁰ Fabbro Sandro. The design of a plural land use planning systems: a tentative proposal from an Italian perspective.

²¹¹ Cheshire Paul, Sheppard Stephen. The Introduction of Price Signals into Land Use Planning Decision-making: a proposal.

On the other hand, the second article discusses the limitations of a neo-classical economic analysis of land markets. The argument of this paper is that new institutional economics does that better than neo-classical economics. The difference between the two approaches is that the initial conditions, to which the theorems are applied, are more realistic in new institutional economics than in neo-classical economics²¹².

14. Infrastructural projects: modeling, institutions, empirics (7)

Topic of infrastructural projects can be considered as one of the few where sharing experience between regions and countries can be organized in the easiest way. Therefore in spite of limited numbers the impact and influence of the reports in this section are very high.

The first paper discusses the tension between two dominant approaches to governance that are implemented with regard to the planning, design and development of infrastructure networks, such as roads and railways - the hierarchical (top down) and the consensual (bottom up) style. The planning, design and development of infrastructure networks have such a widespread, trans-sectoral impact, that a top down approach is considered to be no longer viable. Consensual approaches are designed and implemented, appealing banners, such as co-production, open planning processes and participatory policy making. These appealing names lead to innovative forms of interaction and participation of stakeholders. Stakeholders are enticed to participate in design workshops, brainstorming, coffee table talks, internet based discussions and surveys and market consultations. Can hierarchical and consensual styles of governance, simultaneously be helpful in planning, design and development of infrastructural networks, and if so, how and to what extent? This is the question authors pose in their article²¹³.

In the second paper a literature review has been presented on the subject of public private partnerships for the development of infrastructure projects. The central question in the paper was: "Is public private partnerships a viable option for investments in infrastructure from a theoretical point of view?" The role of the national and regional governments in financing infrastructure is changing. This changing role means that the national governments withdraw themselves on core functions. Regional governments are given more responsibilities. In Europe, most public private partnerships in infrastructure are worked out as a concession (not a real public private partnership). This means that aroused hopes for advantages in practice, partly do not materialize. The concessions in Europe appear to be expensive agreements between public and private parties that lead to some financial relief for public parties in the short run. Theory and facts prove that public private partnerships seems not a very viable option for investments in infrastructure.²¹⁴

In the third paper new Gotthard base tunnel project, the longest railway tunnel in the world and the most impressive element of the new transalpine railway line through the Alps is examined. In view of the difficult accessibility and extreme climatic conditions, ensuring the fast and reliable transit of more than 300 trains per day through the two 57 km long single-track galleries represents a considerable technical challenge. That construction has been going on for 8 years, only now the construction project has been totally integrated into people's day to day lives and it is not really perceived as disruptive. The relationship between the local population and the construction site workers is described as good by both sides. The region of Switzerland Upper Surselva has become more dynamic, more projects are being initiated, such as the spa facility, that would not have been possible without the construction site. It remains to be seen whether the Upper Surselva region can maintain the momentum spurred on by the construction site and can influence its image over the long term in a positive way²¹⁵.

In the fourth paper authors have explored two round of a complex decision-making in spatial projects and their outcomes. The spatial project at the core of the paper is a harbor

²¹² Needham Barrie, Segeren Arno. An Institutional analysis of land markets.

²¹³ Immers L.H., Duijn M. The use and value of hierarchical modeling in infrastructure network planning.

²¹⁴ Wiegman Bart W., Kievits Maarten, Spit Tejo. Concessions to PPP? A perspective on infrastructure development in the EU.

²¹⁵ Strauf Simone, Walser Manfred. New Ways through the Alps - Impact of a big Construction Site on a Small Mountain Village.

expansion project called Maasvlakte II. Authors use network theory and especially the concepts actors and arenas to highlight the complexity of decisions and the connections between various separate decisions. Decisions to develop the Rotterdam harbor are being taken in a network of local, regional, national, European and international actors, both public and private. These decision-making processes show a lot of complexity. The complexity results from interactions between actors connected in different arenas²¹⁶.

Authors of the fifth paper discuss future development of Amsterdam Airport Schiphol. Decision making about the future airport development of the Dutch mainport Schiphol was both during the period 1989-1991 and the present-day situation. The nature of the decision making process has been altered significantly. This is due to the fact that the national government had a much stronger leadership role during 1989 – 1991 than it has by now. The other actors involved have gained more influence and have more possibilities to defend their own specific interests. This leads to all kinds of strategic behavior, which makes the process more complex. The existence and growing importance of the complexity of the decision making arena, like the existence of countervailing powers and the influence of private partners, the future uncertainties, the shifting power bases and constantly changing nature of interactions etc., seem to have a disturbing influence on the process. The factor trust seems to lie at the core of all the other factors put under study. Without trust the parties shall stay in a constant stalemate, because of their interdependency. Authors argue that a new more thematically oriented approach is necessary that takes changing context and changing nature of the process explicitly into account²¹⁷.

The sixth paper conducts a preliminary cost-benefit analysis of a new tunnel under the Scheldt river near the centre of Antwerp in order to relieve traffic congestion on the ring road and in an existing tunnel and three alternative tolling schemes, and compares them with a do-nothing scenario and an option to toll the existing tunnel without building a new one. The new tunnel is expected to cost more than €1 billion, and tolls have been suggested to help finance construction and to manage demand. The analysis is performed using a model that was recently developed as part of the European-Union funded REVENUE project²¹⁸.

The goal of the seventh paper is to describe and analyze co-production in public private partnerships in spatial planning. Authors describe one specific case study, the location development project Sijtwende on the edge of two municipalities (The Hague and Voorburg), on the edge of public and private investments and on the edge of urban development and extension of the mobility system. Authors elaborate the bottlenecks in the cooperation between several actors involved. They look for important breakthroughs in the process of collaborative development of the area²¹⁹.

15. Border regions (7)

New role of European borders under the new conditions of European integration has become the traditional topic of the last Congresses. In our subset there are seven reports devoted to this topic. The aim of the first is to investigate the characteristics of the new economic geography at the external borders of the EU and the extent to which variables of city size and distance from borders can determine the type and level of economic interaction. Cross border economic co-operation at the external borders is taking place among unequal partners.

The empirical analysis is based on research carried out in nine cross border zones at the EU external borders, within the framework of the EXLINEA research program. The empirical results of the analysis show systematic correlation at the borders between distance and urban system and also between the type and level of economic interaction. In almost all cases, the largest city near to the borders exhibits a significantly larger mean value compared to that of the

²¹⁶ Van Gils Marcel, Klijn Erik-Hans. Complexity in decision-making: the case of Maasvlakte II Connecting decisions, arenas and actors in spatial decision-making.

²¹⁷ Van Boxtel Martijn, Huys Menno. Unravelling decision making about the future developments of Amsterdam Airport Schiphol.

²¹⁸ Proost S., S. der Loo Van, de Palma A., Lindsey R. A cost-benefit analysis of tunnel investment and tolling alternatives in Antwerp.

²¹⁹ Edelenbos Jurian, Teisman Geert R. Co-production on the edge of process and project management. The Sijtwende development project.

nearest city. The significance of the results is augmented as one gradually moves from small cities to the capital. These results lead to the conclusion that there is a special role for the large urban centre close to the borders as this could operate under certain conditions as a hub of all sorts of economic activities. The “core-periphery” model pertains to a great extent the new economic geography of the EU-25 external borders²²⁰.

Second paper reflects the subject of the impact of EU enlargement on European regions. There are pronounced differences among regions in the enlarged EU as regards the integration effects resulting from changes in market access. The simulation analysis indicates that the new member states benefit more from enlargement than EU15 countries. Thus, the impact of enlargement will be in support of cohesion, if one considers effects on market potential and corresponding income changes only. Border regions indeed realize higher integration benefits than non-border regions. The surprisingly strong impact of enlargement on market potential of external border regions might be partly caused by the extremely low level of market potential before integration²²¹.

Main focus in the third paper is on issues related to changes in the system of production, regional as well as international, and a cross border perspective including an assessment of cross border flows, i.e. trade and FDI, implication for regional economic performance and employment in the out-sourcing regions as well as in insourcing regions. Empirically, the analysis is based on results from a project analyzing regional development in the Baltic Sea Regions. Issues addressed are spatial impacts of alterations in the economic linkages in the BSR since the transition process started. Theoretically, the concepts applied are based on economic integration and location²²².

The aim of the fourth paper is to analyze the process of innovation in a transterritorial view. The study looks at five sub regions of the transborder region of central region Portuguese and Spanish. This paper seeks to analyze to what extent local actors have been involved in fostering innovation in the Raia Central Iberica. Altogether the study includes 169 companies and 55 institutional and associative organizations. Authors prove that cooperation is a vehicle to promote territorial innovation and competitiveness. The cooperation networks reduce the intrinsic uncertainties in the process of innovation²²³.

The fifth paper analyzed the cross-border region of Spanish Baixo Mino and Portuguese Alto Minho’s equivalent area as common tourist destination place. Idea of this paper is that the analysis of tourist destinations focused on previously established territorial units (cities, regions, countries) does not conform itself with tourism market reality in several situations. Persons tend to travel to a place not attending to administrative borders or administrative limits²²⁴.

The sixth article deals with cross-border cooperation (around the Ireland-Northern Ireland border) that foster local learning and contribute positively to business performance and social cohesion on the island of Ireland. Around one in six in Northern Ireland and one in twelve in Ireland also engage in cross-border cooperation²²⁵. The purpose of the last study is to describe the development of cross-border connections along the Hungarian-Romanian borderline. This is one of the temporary external borders of the European Union. The Hungarian-Romanian PHARE CBC program had/has a significant role in intensification of connections among people living on both sides of the border²²⁶.

16. Entrepreneurship and small firms (6)

²²⁰ George Petrakos, Lefteris Topaloglou. Tracing the New Economic Geography of the Borders in Europe.

²²¹ Niebuhr Annkatrin. The Impact of EU Enlargement on European Border Regions.

²²² Cornett Andreas P. Economic integration in a cross border perspective: An emerging new system of production?

²²³ Natario Maria Manuela Santos, Neto Paulo Alexandre. The transregional innovation processes: the key challenge for the transborder regions.

²²⁴ Cadima Ribeiro Jose, Cruz Vareiro Laurentina, Padin Fabeiro Carmen, Pardellas de Blas Xulio. The tourism potential of border regions: endogenous resources and destination image evaluation.

²²⁵ Roper Stephen. Cross-Border and Local Co-operation on the island of Ireland: An Economic Perspective.

²²⁶ Balcsok Istvan, Dancs Laszlo, Koncz Gabor. The development of Hungarian-Romanian crossborder connections after the change of regime.

Role of entrepreneurship as the engine of regional economic growth has gained increasing attention since 1990-s. In our Congress subset six papers were devoted to the SME development and entrepreneurship. The first study addresses the relation between resource endowment of entrepreneurs and their prior employment career. It is shown that the capabilities of entrepreneurs classify into three categories. There is a production component of knowledge, an organizational component, and finally a market component. The three components encompass all aspects of running a business. Based on these components, several types of entrepreneurs can be distinguished. First, there is a group of entrepreneurs that do not rely on knowledge gained in previous employments. Entrepreneurs that mainly transfer organizational knowledge to their new firm form the largest group. Finally, there is a group of entrepreneurs that have used knowledge from all three components. These entrepreneurs have good knowledge of the product, the organization, and the market. This group is understandably small, as the entrepreneurs need a broad frame of reference. coming from the same industry provides the entrepreneur with more relevant knowledge which is concentrated on the product side of the business. Previous self-employment spells do not induce knowledge transfer, contrary to theoretical believes²²⁷.

In the second paper authors use an Entrepreneurial Intention Questionnaire (EIQ), which has been recently validated, to measure entrepreneurial intentions in a sample of students from two different Spanish universities in Seville (authors suggest that the entrepreneurial intention is one of the key elements in explaining firm-creation activity levels). They pay attention to the influence of different personal and family variables on entrepreneurial intention and its antecedents. There appears to be a marked gender difference regarding their views of entrepreneurship²²⁸.

The focus of the third article is on a comparative evaluation of the various forms of migrant entrepreneurship in different European countries such as Belgium, Denmark, France, Germany, Greece, Italy, The Netherlands, Portugal, Sweden, and the UK. This comparative evaluation enables to identify the “European” models of migrant entrepreneurship and to highlight the determinants of migrant entrepreneurship in Europe²²⁹.

The aim of the fourth paper is to present the results of a conducted survey of small and medium sized enterprises, which achieved the OKOPROFIT-certification in the last four years. Sustainable business can lower operational costs and open new business fields to the welfare of the enterprise²³⁰.

Two last papers deal with concrete cases in SME regional development. The former describes specialized companies in European mature sectors. Specifically, authors examine about 100 firms from the agro-food, textile and wooden furniture sectors from the province of Jaen (Andalusia, Spain). Only by making an adequate use of ICT, and particularly using it to manage the factor markets, can firms guarantee the competitiveness of their products in international markets²³¹. The latter examines French biotechnology SME’s. Authors thought that the choice between various kinds of conflicts’ resolution (cooperative or forcing resolution) appears to be liked to various articulation of proximity²³².

17. Rural households, firms, policy (5)

As a rule rural issues are not collected in the definite section of the Congresses. But each year from five to ten articles are directly devoted to this topic. The first paper in this topic examines agricultural households for the years 1995 and 2002 utilizing sample survey data on living conditions (specific study of subjective well-being). The results indicate that

²²⁷ Koster Sierdjan. Entrepreneurial capabilities inherited from previous employment. What did entrepreneurs learn in their careers?

²²⁸ Linan Francisco, Rodriguez-Cohard Juan C., Rueda-Cantuche Jose M. Factors affecting entrepreneurial intention levels.

²²⁹ Baycan-Levent Tiizin, Nijkamp Peter. Determinants of Migrant Entrepreneurship in Europe.

²³⁰ Drenk Dirk. Sustainable business - a success story for small and medium sized enterprises?

²³¹ Rodriguez-Cohard Juan Carlos, Moral-Pajares Encarnacion. ICT, global markets and small firms in less-developed regions in Europe: the case of mature sectors in a Spanish province.

²³² Gallaud Delphine. Conflicts and proximity in cooperation to innovate: French biotechnology Sme’s.”

there are differences in experienced utility between regions and that one can identify changes over time. The average level of general well-being is higher than the average level of farm satisfaction for both years, both regions and for all principal produce. This may be taken as an indication that the increased uncertainty in the agricultural sector, which is induced by the change in Norwegian national policies, is better reflected in the farm satisfaction measure than in the general well-being measure²³³.

The second paper analyses how rural firms are linked through their sales, purchases and employment to the local economy as well as to the regional, national and international markets. Using primary data collected in thirty small towns and their surrounding areas across five European countries, authors identify firm's characteristics as well as characteristics of local context and local markets associated with local integration or wider behaviors. The more traditional the firm (small and independent firm with low labor productivity and managed by a local owner), the more local its spatial sales and purchases behavior. The size of local output market, the strength of local competition or the characteristics of local labor market in terms of skill matching do not play any role. The only characteristic of the local markets that affects the firm's spatial behavior is the gap between individual's demand for inputs and the local supply of such inputs²³⁴.

Third paper presents an outcome-based payment scheme to reward ecological services in agriculture with the focus on the use of auctions. Starting in January 2004 the payment scheme is tested upon its implementation as an agri-environmental program. The intention of the program is to overcome the disadvantages of existing and mostly action-orientated agri-environmental programs²³⁵.

Fourth paper has two threads, one focusing on the analysis of the relationships between regional growth and agricultural policy, generating models needing testing, while the other attempts to meet the software demands generated in the first thread, and to incorporate on-going research in spatial data-analytic methods to respond adequately to the potential importance of the substantive research question²³⁶.

In the last paper authors analyze Israel rural-urban land allocation in light of the increasing environmental role of agricultural landscape. Disappearing farmlands due to urban sprawls are commonplace in developed and densely populated regions. In our framework the optimal farmland allocation depends not only on the amenity value of agricultural landscape in general but also on its distribution across agricultural crops. Crop areas differ in their return to farming and in the amenity value they generate. The amenity value of farmland, thus, bears both on the overall rural-urban land allocation and on the allocation of farmland between the different crops. These observations should be considered in any agricultural policy intervention²³⁷.

18. Island economy (5)

Island economy can be seen as special case of regional economy. For instance, traditionally, in the islands, the government intervention in terms of employment, economic planning is excessive. An important matter in isolated, peripheral and underdeveloped regions is the diffusion of innovations. The agglomeration of institutions, populations, firms and social networks in a reduced geographical space enables are advantages of the island economy. Island societies have a large and cohesive social capital, and share a homogeneous set of values and cultural attitudes, which facilitates experiences of collective action (see further in detail: Almeida Antonio, Martins Isabel, Andrade Joao, Freitas Joao. The

²³³ Bjornsen Hild-Marté. Living conditions and subjective well-being of farmers: an ordered response analysis of regional differences and changes over time.

²³⁴ Courtney Paul, Lepicier Denis, Schmitt Bertrand. Rural firms and the local economy - A focus on small and medium-sized towns.

²³⁵ Groth Markus. Auctions in an outcome-based payment scheme to reward ecological services in agriculture – Conception, implementation and results.

²³⁶ Bivand Roger, Brunstad Rolf. Further explorations of interactions between agricultural policy and regional growth in Western Europe: approaches to nonstationarity in spatial econometrics.

²³⁷ Fleischer Aliza, Tsur Yacov. The Amenity Value of Agricultural Landscape and Rural-Urban Land Allocation.

entrepreneurial attitude, geographical isolation and university students: some evidence from the Atlantic).

Authors from different countries can offer scientific community a lot on the regularities and specificity of islands economic development. It is a pity that these collective experience is not united under separate section of the Congress and as a rule these reports are scattered under numerous sessions (to lose any hope to find regularities).

In the first article from the list Island of Madeira is the subject of research. Paper describes the changing and uncertain economic and political environment faced by island societies. What kind of impact does the perceived “island penalty” have on the propensity towards entrepreneurship? This is the central question of the article.

Island of Madeira’s entrepreneurial experience is quite different from mainland Europe reality. This is owing to the high level of micro-businesses, due to subsistence issues, as a response to the reduced opportunity costs, the lack of profitable employment options and the high levels of unemployment. The high level of entrepreneurship is only partially related to high-tech innovative firms, the growth of qualified employment options and economic diversification²³⁸.

In the second paper, the authors study the inter-municipal commuting network of Sardinia, Italy, describe the habitual daily work and study-led movements among 375 municipalities. (The inter-urban commuting system of the island of Sardinia is considered as a weighted network.) In this complex network, the nodes correspond to urban centers while the links to positive commuting exchanges among municipal towns. In the perspective of policy-making and planning, the emerging network behaviors are critically compared to the geographical, social and demographical aspects of the transportation system. Authors compare topological and weighted network analysis results with socioeconomic characteristics of the Sardinian municipalities. They show the potentiality of the network approach as a valuable tool at various stages of policy-making and environmental planning processes²³⁹.

The third paper examines ferry fares and quality of service to a remote island region and analyzes how this affects the economy of the islands. Taking the Western Isles in Scotland as a case study, the paper identifies the links between fares, service, and economic development and attempts to quantify this impact. Reduction in ferry fares and, in particular in increase in service frequency, will have substantial income and employment benefits to the local economy, running into millions of pounds annually²⁴⁰.

The fourth paper is devoted to the topic of historical evolution of land uses in small islands. Based on data on the export crop and on the population authors estimate the different land use of the island for all the sectors and to assess the carrying capacity of the island²⁴¹. Last paper underlines the role of the planner (which represents the person in charge of organizing the territory taking into account its weaknesses) in the island economy²⁴².

19. Regional dimension of migration (4)

In general inter-regional migration in Europe is weaker in comparison with the US. Meanwhile the role of migration flows in competitiveness of the regional labor markets is universally acknowledged. In many old industrial cities of Europe immigration plays the role of engine of economic growth. Because of this topic of migration presents at every Congress, but with different intensity. In our subset of articles there are four devoted to the migration problems.

²³⁸ Almeida Antonio, Martins Isabel, Andrade Joao, Freitas Joao. The entrepreneurial attitude, geographical isolation and university students: some evidence from the Atlantic.

²³⁹ De Montis Andrea, Barthelemy Marc, Campagna Michele, Chessa Alessandro, Vespignani Alessandro. Emergent topological and dynamical properties of a real inter-municipal commuting network: perspectives for policy-making and planning.

²⁴⁰ Greig Malcolm, McQuaid Ronald W. The Impact of Ferry Services on an Island Economy.

²⁴¹ Goncalves Joana, Dentinho Tomaz. A spatial interaction model for agricultural uses. An application to understand the historical evolution of land use on a small island.

²⁴² Cirelli Caterina, Mercatanti Leonardo, Domenico Enrico, Carmelo Nicosia, Porto Maria. Precaution and Protection policies of Urban ecosystem in the Iblea North Eastern Coast of Sicily.

The first paper originates from a study for EUROSTAT to find a generally applicable migration model. It emphasizes the distinction between micro and macro approaches, between influences and determinants, and between mathematical and statistical models. It highlights a recent two-stage model developed for use in a policy context in the UK and contrasts this approach with models developed in the context of multi-state demography and used for migration projection in the European Union. There is a long tradition of modeling internal migration and a wide variety of approaches that can be differentiated into those based on micro or individual decision-making and those that deal with macro effects on aggregate flows. It is macro approaches to migration modeling that are applicable in the context of this study. Models divide the migration process into two parts: the first part models the out-migration from each origin; and the second part models destination choice. Certain models generate a pool of out-migrants which are allocated to different destinations, but it is preferable to allocate migrants from each origin to each destination because there are frequently important factors that link certain origin and destination pairs. It is important to recognize the difference between those causal factors or variables that determine migration (such as marriage or job opportunities) and those factors that have a selective influence on migration (such as age or social class). It is essential to develop models of out-migration and destination choice that are age-specific and which divide the aggregate flow into appropriate life course groups²⁴³.

In the second paper authors study geographical labor mobility taken by workers in Spain from a regional standpoint (interprovince migration rate from one province to another through the differential in the levels of several variables in two provinces). Using a panel data set referred to the evolution of these decisions in the 1990-2004 period, the main objective is to determine what are the main variables that influence in labor mobility as well as to quantify their impact. Regional labor market status, spatial variations in employment opportunities together with per capita GDP and house prices have turned to be the main determinants²⁴⁴.

The third paper offers a panorama of how migrants are dispersed across Greece in respect with their country of origin. This is followed by an attempt to identify the causal economic, social, and demographic factors of the spatial distribution of migration using various econometric tools, including spatial regression. More than half of the immigrant workers in Greece have come from Albania. The top four nationalities of immigrant workers, that is Albanians, Bulgarians, Romanians, and Georgians, account for more than 70 percent of the total number of foreign workers. Immigrants coming from countries of the former USSR appear to have higher levels of education. In contrast, the major group of immigrant workers (Albanians) has significant lower level of education. Female immigrants are more educated in comparison to men. A high proportion of foreigners is found in Attica (that is in Athens area). The most important factors for the spatial distribution of immigrant workers at prefectural level, are population density, the level of agricultural activity, the activity of the construction sector, and the activity of tourism²⁴⁵.

The aim of the final paper is to evaluate internal migration movements between provinces in Turkey in terms of their level of development and to test the features that make developed regions centers of attraction against the locational factor. In addition to the hypotheses that test the locational features of provinces in internal migration, authors discuss the results of regression analysis, which employed socio-economic indicators to measure the effect of regional inequalities on internal migration²⁴⁶.

20. Прямые иностранные инвестиции (4)

For transition countries the topic of foreign direct investments is very popular and important. But at the last ERSA Congresses it is usually presented in a very modest way (less than 3-5 reports).

²⁴³ Stillwell John. Inter-regional Migration Modeling: A Review and Assessment.

²⁴⁴ Angulo Ana M., Mur Jesus. Geographical labor mobility in Spain: a panel data approach.

²⁴⁵ Rovolis Antonis, Tragaki Alexandra. The Regional Dimension of Migration in Greece: Spatial Patterns and Causal Factors.

²⁴⁶ Gezici Ferhan, Keskin Berna. Interaction between Regional Inequalities and Internal Migration in Turkey.

The first article in this section analyzes the relationship between the inward Foreign Direct Investment in South-eastern European countries in relation with the factors which determine the ability of a country to attract foreign investment capital. The article focuses on the definition of the Foreign Direct Investment flows, regional attractiveness, factors which affect the location of FDI activities within and across countries and regions²⁴⁷.

The second article analyzes the spatial distribution of FDI (foreign direct investment) firms among the provinces in Turkey from 1990 to 2003. In 1980 there were 78 FDI firms in Turkey whereas the number increased by 6511 at the end of 2003. Turkey has become a hub of vast hinterland that extends from Balkans to Caucasus and represented a prime focus for foreign investment. For this reason, it is very important to know the characteristics and spatial distribution of FDI firms in Turkey.

As location decisions of foreign investors are generally determined by agglomeration economies (population growth in the provinces and previous investment, infrastructure, amount of bank credit and local market growth) a model is developed to test the agglomeration economies - as a demand, urbanization economies, market size, employment structure, government incentives, information cost, locational wealth and infrastructure²⁴⁸.

Europe became a major recipient of FDI flows but Italian regions have been largely excluded from this process. Was it due to their characteristics, or were Italian regions 'doomed' by a negative country effect? This might be explained by individual regions' characteristics or by some 'country effect' affecting all Italian regions. The third paper addresses this issue by estimating the determinants of multinational firms' location choices in 52 EU regions. Authors find that Italian regions indeed attracted significantly less than their observable potential, and that this could be explained by country-level characteristics. In particular, the efficiency of the bureaucratic apparatus and of the legal system seem to play a key role in explaining FDI flows²⁴⁹. Authors pose the question whether it is appropriate within a country with significant regional imbalances like Italy to have an homogenous corporate tax rate.

Last paper tries to investigate the determinants of FDI in Istanbul at the district level²⁵⁰.

21. Financial, investment policy (3)

Final sector unites rather dispersed issues. The first paper gives an overview on the most important issues regarding intergovernmental fiscal relations, potentials and limitations for financing of local development in Croatia. It gives a general background for analysis of intergovernmental fiscal relations. It suggests explanation of potential sources for financing local development projects (local budget; local borrowing for capital purposes through loans from financial institutions and other credit institutions or through capital market; public-private partnerships; external support and aid; extra-budgetary resources; transfers from the state budget for the implementation of state policy to promote local development and national and regional programs and projects; and other sources. Author underlines several factors that are recognized as major obstacles to local development financing²⁵¹.

The aim of the second paper is to identify how the application of geographic real estate diversification strategies in the UK determines the flows of funds coming into regions, and the consequent impacts on regional investment in the regional built environment. Number of studies have examined the benefits of regional diversification strategies within commercial real estate portfolios with two approaches adopted; the first is based on primary contiguous geographical regions while the second employs areas based on economic function. In general,

²⁴⁷ Kokkinou Aikaterini, Psycharis Ioannis. Foreign Direct Investment and Regional Attractiveness in Southeastern European countries.

²⁴⁸ Berkoz Lale, Turk Sevkiye Sence. Factors influencing the choice of FDI locations in Turkey.

²⁴⁹ Basile Roberto, Benfratello Luigi, Castellani Davide. Attracting Foreign Direct Investments in Europe: are Italian Regions Doomed?

²⁵⁰ Sence Sevkiye, Berkoz Turk Lale A Spatial model of change of FDI firm population in Istanbul.

²⁵¹ Alibegovic Dubravka Jurlina. Intergovernmental fiscal relations: potential and limitations for financing of local development in Croatia.

the conclusion is that diversifications strategies based on simple geographical areas adds little, if anything, while economic based regions have shown much greater potential²⁵².

EU enlargement to the less developed countries in Central and Eastern Europe is forcing policy makers to reconsider the role of business subsidies in the EU. In the last paper authors study conditions under which investment subsidy is a necessary requirement for investments in Finland. Empirical analysis is conducted using micro level data on investment projects of private sector firms. The data set comprises 1,836 projects that received public investment subsidies between 2001 and 2003. Our results show that the necessity of the investment subsidies is strongly dependent on the location of investment project and the intensity of aid²⁵³.

III. Topics that united the whole stream of papers

Walter Isard and Thomas Reiner at the end of Lund Congress in 1963 mentioned that European Congress always seemed to achieve a focus which was usually lacking in the Congresses in North America [4]. It is especially interesting to cite this statement taking into consideration unlimited variety of European nations, regions, and cities.

Can we reveal focus of Amsterdam Congress? Do “big” European Congresses at the beginning of 21 century with hundreds of reports and papers keep traditions of “small” Congresses of 1960’s with only several dozens of reports and papers? Under the focus we mean hidden, informal focus not necessarily reflected in the official title of the Congress. It seems that beneath official topics of land use and water management we can reveal closely but invisibly connected with them several accents of Amsterdam Congress going through dozens of papers as the general line: role of density factors in the development of European regions; link between natural and social in regional development (and, more broad, in Regional Science as a whole); regional dimension of network society; problems of human safety and (regional) economy of catastrophes; economy of culture.

3.1. Density factors

Density factors (lack of people or lack of space?) divide European regional science into two sciences – urban for the populated regions and regional for the territories scarcely populated with very different themes, methods and tools of research. Housing markets, urban sprawl and commuting patterns are popular topics in the first case²⁵⁴; labor markets and human capital in the second case. New Economic Geography models work smoothly in the first regions but are inappropriate in the second. Competition is harder in the labor markets of the populated regions but is softer in the regions with scattered population where it is substituted by the forces of cooperation.

Density factors determine the differences in research of European regional scholars. Several reports at the Amsterdam Congress were specifically devoted to the factors of density in the regional development²⁵⁵, their relations with the model of land use and water management.

3.2. Link between natural and social factors

Until the 1990’s, most studies on economic growth have tended to ignore or underplay the role of physical geography. Since the development of NEG, economists have re-discovered geography and include climate, access to the sea, soil quality, as explanatory variables in their equations for explaining economic development and cross-country

²⁵² Byrne Peter, Lee Stephen, McCann Philip. The Implications for Regional Investment of Diversification Strategies in Commercial Real Estate Portfolios.

²⁵³ Haapanen Mika, Ritsila Jari, Tokila Anu. When are investment subsidies crucial for investments?

²⁵⁴ As an example of specificity of toolbox of urban studies see article written by two authors from densely populated countries: The theoretical and methodological toolbox of urban economics: from and towards where? Capello Roberta, Nijkamp Peter. 43rd Congress of the ERSA. 2003. Unpublished manuscript.

²⁵⁵ See, for instance, Kasanko Marjo, Barredo Jose I., Lavallo Carlo, Sagris Valentina, Genovese Elisabetta. Towards urban un-sustainability in Europe? An indicator-based analysis.

differences in the level and growth of per capital GDP²⁵⁶. The very title of the Congress has promoted integrative tendencies to use natural factors to explain traditional phenomena of the regional science²⁵⁷. Issues of land and water management coincide with economic growth and regional development in many reports. As far as we know such attempt of synthesis of natural and social factors in regional development was not characteristic for the last previous Congresses.

But problem of unification natural and social factors in one Regional Science are broader only combinations of determinants. We should remember W. Isard's stress on parallels from natural sciences, productive for the Regional Science [7]. Art of analogies seeming to be the fingerprint for the regional scholar.

3.3. Network society

In many papers of the Amsterdam Congress networks approach was utilized in a creative and unexpected way. From that point of view Amsterdam Congress indeed contributed to the development of M.Castells' ideas on the network society.

On the other hand in the reports networks were examined on different levels: a) as polycentric urban regions²⁵⁸ replacing Cristaller's hierarchy of central places (more broad, as network model of spatial organization); b) as transportation networks; c) as public-public, public-private partnerships combining public and private stakeholders in the decision-making process.

European regions differ by the speed of transformation of their urban landscape in from monocentric cities to polycentric urban network. Network society changes the nature of planning and decision-making process in the regional policy in general and infrastructural investment projects in particular. After urban-rural divide of the industrial society we get accessibility divide in the network society. Accessibility problems get political economic sound. Under the network paradigm old definitions and phenomena of Regional Science are being reinvented, revisited, rethought²⁵⁹.

3.4. Safety, economy of catastrophes

Papers in Amsterdam Congress stressed ideas of disaster management. Before socially neutral topic of land use and water management transformed into the issue of human safety. Safety now is embedded in the total definition of quality of life. With very broad positions we can include in this "cluster" not only Congress papers on flood management and prevention, but on gated communities (spatial segregation), gender wage gap, demographic depopulation in many European regions (the whole idea of EU integration can be seen as reaction on demographic challenges).

3.5. Economy of culture

Catastrophes can be seen as break in gradual development. On the other hand, culture is a symbol of stability, path-dependency. Papers at Amsterdam Congress diagnose these two opposite tendencies in European Regional Science.

Many authors tried to see in the cultural variety of Europe not only barrier for EU integration, but impetus for innovation, natural competitive advantage of European regions. Culture as soft factor of regional development in Europe was investigated in many papers.

²⁵⁶ Peeters Dominique, Thomas Isabelle. Influences of the shape of a territory on the optimal locations of human activities? A numerical geography approach.

²⁵⁷ See, for instance, Cheshire Paul, Magrini Stefano. Population Growth in European Cities: weather matters – but only nationally; there were also several other reports in such format.

²⁵⁸ Van Eck Jan Ritsema, Daalhuizen Femke. The Randstad as a Network City; Cheng Jianquan, Le Clercq Frank, Bertolini Luca. Understanding urban networks through accessibility; Meijers Evert. High-level consumer services in polycentric urban regions: hospital care and higher education between duplication and complementarity; Romein Arie. The contribution of leisure and entertainment to the evolving polycentric urban network on regional scale: towards a new research agenda, et als.

²⁵⁹ Look, for instance, on the interesting attempt to elaborate incubators case in the network paradigm - Soetanto Danny P., van Geenhuizen Marina. Technology Incubators as Nodes in Knowledge Networks. Paper for the Amsterdam Congress.

For instance, one paper outline the ways in which the cultural image of a place as a “final provided good” could be produced, supported and promoted effectively vis-a-vis the external environment, investigates the relationship between vision, local identity and image, focusing on culture and tourism²⁶⁰. Another paper introduces a list of regional indicators of the European cultural heritage and identity. Authors argue that spatial planning has to take into account the cultural infrastructure of the territory (in its tangible and intangible expressions) both as a vehicle of development strategies and a constraint which should not be affected by development strategies. The cultural heritage of Europe is not just an ensemble of tangible assets to be conserved, but rather an element of dynamism of the territory, affecting trajectories of regional development²⁶¹. One should mention paper on absolutely unexpected partnership of railway and museums²⁶².

Regional economy of culture means enlargement of new economic activities like leisure, tourism, outdoor recreation. It means also increasing economic role of symbols in regional development. In the industrial economy the major value was in the goods. In the service post-industrial economy the major value are symbols.

IV. Conclusions (seven lessons from the Amsterdam Congress)

1. European Regional Science (and the conclusion of Gunther Maier’s work²⁶³ on the division of preferences for professional journals between European and Japan-American regional scholars proves it) is distinctly different from the American and Asian. To keep precise identity of the European Regional Science is very important for its stable and safe future development. Therefore it is useful to stress European-American differences in approaches, models, and methodology whenever it is appropriate. It will be useful to organize special section at the future Congress on the similarities and differences between European and American relatives inside the family of Regional Science.

2. Networking paradigm has already stimulated scattered efforts of many researchers in the Regional Science. Maybe it is time now to collect this first experience, to create conditions for free exchange of opinions under the umbrella of special temporary “laboratory” organized during one of the future Congresses?

3. Now almost “clandestine” papers on institutional agenda of Regional Science (regional development) should get more official recognition. It will be useful to organize special section on the potential of method like comparative institutional analysis, of institutional economics in the Regional Science. Doing so, we shall keep traditions of W.Isard with his always energetic attempts to enrich Regional Science with methodology and methods from border and not only border sciences.

4. Until now as a rule titles of Congress sections sound one-sided – as only convergence, integration, urban growth, etc. Meanwhile in real European regional development we usually have convergence and divergence, urban sprawl and shrinkage, integration and segregation, big and small business development. It will be useful to provide this dialectic in the very title of the sections to give the full picture of the reality.

5. Regional science pretends to being an interdisciplinary activity. Therefore attempts to provide synthesis of natural and social phenomena in the Regional science could be more insistent. International Geological Congress of 2004 in Italy had special section titled

²⁶⁰ Deffner Alex, Metaxas Theodore. Shaping the vision, the identity and the cultural image of European places.

²⁶¹ Russo Antonio, Jansen-Verbeke Myriam, Van Der Borg Jan. Mapping the Dynamics of European Culture: Pressure and Opportunities from the European Enlargement.

²⁶² Bogiazides Nick, Kotsiou Eftychia, Vougioukas Manos. The Regional Impact of Heritage Railways.

²⁶³ Maier Gunther. What do we think are the most important journals in regional science? Paper for the Amsterdam Congress. Unpublished manuscript.

“Geology and Culture”. Maybe it is example for regional scholars to move in the opposite direction, to elaborate integrative sections bridging natural and social aspects of regional development like economy of regional landscapes, etc.

6. Density issues can become common platform for many directions of research in regional development, both social and natural.

7. Big investment projects are big issue for many European regions. But very rare they become the focus of special Congress section. Meanwhile it is the topic of common interests of many participants from many countries. Sharing experience accumulated by each case, by each country and region in this could be useful for all.

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5. Isard Walter Summary of the Ghent Congress. Regional Science Association: Papers, 14. Ghent Congress, 1964. Pp. 197-202.
6. Isard Walter, Smith Tony E. Summary Paper: The Supply and Demand for New Techniques evidenced at the 5th European Regional Science Congress. Regional Science Association: Papers, 16. Cracow Congress, 1965. Pp. 163-167.
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